The trillion dollar

gap

Underfunded state retirement systems and the roads to reform



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For additional information on Pew and the Center on the States, please visit www.pewcenteronthestates.org.

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Dear Reader:

A \$1 trillion gap. That is what exists between the \$3.35 trillion in pension, health care and other retirement benefits states have promised their current and retired workers as of fiscal year 2008 and the \$2.35 trillion they have on hand to pay for them, according to a new report by the Pew Center on the States.

In fact, this figure likely underestimates the bill coming due for states' public sector retirement benefit obligations: Because most states assess their retirement plans on June 30, our calculation does not fully reflect severe investment declines in pension funds in the second half of 2008 before the modest recovery in 2009.

While recent investment losses can account for a portion of the growing funding gap, many states fell behind on their payments to cover the cost of promised benefits even before the Great Recession. Our analysis found that many states shortchanged their pension plans in both good times and bad, and only a handful have set aside any meaningful funding for retiree health care and other non-pension benefits.

In the midst of a severe budget crisis—with record-setting revenue declines, high unemployment, rising health care costs and fragile housing markets—state policy makers may be tempted to ignore this challenge. But they would do so at their peril. In many states, the bill for public sector retirement benefits already threatens strained budgets. It will continue to rise significantly if states do not bring down costs or set aside enough money to pay for them.

The good news? While the economic downturn has exposed serious vulnerabilities in states' retirement systems, it also appears to be spurring policy makers across the country to consider reforms. This report illustrates that a growing number of states are taking action to change how retirement benefits are set, how they are funded and how costs are managed.

Retirement benefits are an important part of how states can attract and retain a high-caliber workforce for the twenty-first century—and the bill coming due for these promises is an increasingly crucial issue affecting states' fiscal health and economic competitiveness. Later this year, Pew will release a study of cities' public sector retirement benefit obligations and their impact on states. And in the coming months, we will offer additional research on states' budgets and economies—from the main factors driving fiscal stress to policy options that could help states weather the storm.

Sincerely,

Susan Urahn

Managing Director, Pew Center on the States

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Executive Summary

Of all of the bills coming due to states, perhaps the most daunting is the cost of pensions, health care and other retirement benefits promised to their public sector employees. An analysis by the Pew Center on the States found that at the end of fiscal year 2008, there was a \$1 trillion gap between the \$2.35 trillion states and participating localities had set aside to pay for employees' retirement benefits and the \$3.35 trillion price tag of those promises.¹

To a significant degree, the \$1 trillion gap reflects states' own policy choices and lack of discipline: failing to make annual payments for pension systems at the levels recommended by their own actuaries; expanding benefits and offering cost-of-living increases without fully considering their long-term price tag or determining how to pay for them; and providing retiree health care without adequately funding it.

Pew's figure actually is conservative, for two reasons. First, it counts total assets in state-run public sector retirement benefit systems as of the end of fiscal year 2008, which for most states ended on June 30, 2008—so the total does not represent the second half of that year, when states' pension fund investments were devastated by the market downturn before recovering some ground in calendar year 2009. Second, most states' retirement systems allow for the "smoothing" of gains and losses over time, meaning that the pain of investment declines is felt over the course of several years. The funding gap will likely increase when the more than 25 percent loss states took in calendar year 2008 is factored in.²

Many states had fallen behind on their payments to cover the cost of promised benefits even before they felt the full weight of the Great Recession. When Pew first delved into the realm of public sector retirement benefits in December 2007, our report, *Promises with a Price: Public Sector Retirement Benefits*, found that only about a third of the states had consistently contributed at least 90 percent of what their actuaries said was necessary during the previous decade.³ Since that time, pension liabilities have grown by \$323 billion, outpacing asset growth by more than \$87 billion.⁴ Pew's analysis, both then and now, found that many states shortchanged their pension plans in both good times and bad. Meanwhile, a majority of states have set aside little to no money to pay for the burgeoning costs of retiree health care and other non-pension benefits.

As pension funding levels declined over the past decade from states' failures to fully pay for their retirement obligations as well as investment losses from the bursting of the dot-com bubble, states found their annual required contributions going up. In 2000, when pension systems were well funded, states and participating local governments had to pay \$27 billion to adequately fund promised benefits. By 2004, following the 2001 recession, their annual payment for state-run pensions should have increased to \$42 billion. In fiscal year 2008, state and participating local governments were on the hook for more than \$64 billion, a 135 percent increase from 2000. In 2009 and going forward, that number is certain to be substantially higher. Similarly, to have adequately funded retiree health care benefits in fiscal year 2008, state and local governments would have needed to contribute \$43 billion, a number that will grow as more public employees retire and as health care costs increase.

In sum, states and participating localities should have paid about \$108 billion in fiscal year 2008

to adequately fund their public sector retirement benefit systems. Instead, they paid only about \$72 billion.

In states with severely underfunded public sector retirement benefit systems, policy makers often have ignored problems in the past. Today's decision-makers and taxpayers are left with the legacy of that approach: high annual costs that come with significant unfunded liabilities, lower bond ratings, less money available for services, higher taxes and the specter of worsening problems in the future.

Although investment income and employee contributions help cover some of the costs, money to pay for public sector retirement benefits also comes from the same revenues that fund education, public safety and other critical needs and the current fiscal crisis is putting a tight squeeze on those resources. Between the start of the recession in December 2007 and November 2009. states faced a combined budget gap of \$304 billion, according to the National Conference of State Legislatures (NCSL)—and revenues are expected to continue to drop during the next two years. 5 Given these circumstances—and the certainty that the challenges will worsen if they are not addressed—a growing number of states are considering reforms that can put their public sector retirement benefit systems on better fiscal footing.

To help policy makers and the public understand these challenges and their implications, Pew graded all 50 states on how well they are managing their public sector retirement benefit obligations.

Pew's analysis comes from an intensive review of data compiled and reported by the states—information that is publicly available but not easily accessible. Pew collected data on all stateadministered retirement plans directly from states' own Comprehensive Annual Financial Reports

(CAFRs), pension plan system annual reports and actuarial valuations. Once the information was assembled, researchers sent the data back to the states' pension directors to verify their accuracy.⁶ In addition, interviews were conducted with representatives of pension plans in 50 states to provide perspective, case studies and an understanding of the trends and themes underlying the data. Pew researchers analyzed these data to assess the funding performance of 231 state-administered pension plans and 159 state-administered retiree health care and other benefit plans, including some plans covering teachers and local employees.

States have a lot of leeway in how they compute their obligations and present their data, so three main challenges arise in comparing their numbers. First, states vary in their smoothing practices—that is, how and when they recognize investment gains and losses. While most states acknowledge them over a number of years, several show their full impact immediately. Second, most states conduct actuarial valuations on June 30, but 15 perform them at other times, such as December 31. The severe investment losses in the second half of 2008 mean that states that do not smooth and that conduct their asset valuations in December will show pension funding levels that will appear worse off than states that did so on June 30. However, this also means that such states' numbers are likely to show a faster recovery than other states. (In addition, when investments were doing extremely well, their data reflected the full gains immediately, while other states smoothed those gains over time.) Finally, other factors also can impact states' asset and liability estimates, such as assumptions of investment returns, retirement ages and life spans. (See Appendix A for a full explanation of our methodology.) Pew attempted to note these differences whenever possible.

Key Findings

Public sector retirement benefits provide a reliable source of post-employment income for government workers, and they help public employers retain qualified personnel to deliver essential public services. Some states have been disciplined about paying for their policy choices and promises on an ongoing basis. But for those that have not, the financial pressure builds each year.

Among the key findings of Pew's analysis:

Pensions

- In fiscal year 2008, which for most states ended on June 30, 2008, states' pension plans had \$2.8 trillion in long-term liabilities, with more than \$2.3 trillion socked away to cover those costs (see Exhibit 1).
- In aggregate, states' systems were 84 percent funded—a relatively positive outcome, because most experts advise at least an 80 percent funding level.⁷ Still, the unfunded portion—almost \$452 billion—is substantial, and states' overall performance was down slightly from an 85 percent combined funding level, against a \$2.3 trillion total liability, in fiscal year 2006. These pension bills come due over time, with the current liability representing benefits that will be paid out to both current and future retirees. Liabilities will continue to grow and, as more workers approach retirement, the consequences of delayed funding will become more pronounced.
- Some states are doing a far better job than others of managing this bill coming due. States such as Florida, Idaho, New York, North Carolina and Wisconsin all entered the current recession with fully funded pensions.
- In 2000, slightly more than half the states had fully funded pension systems. By 2006, that number had shrunk to six states. By 2008, only four—Florida, New York, Washington and Wisconsin—could make that claim.

 Many states are struggling. While only 19 states had funding levels below the 80 percent mark in fiscal year 2006, 21 states were funded below that level in 2008:8

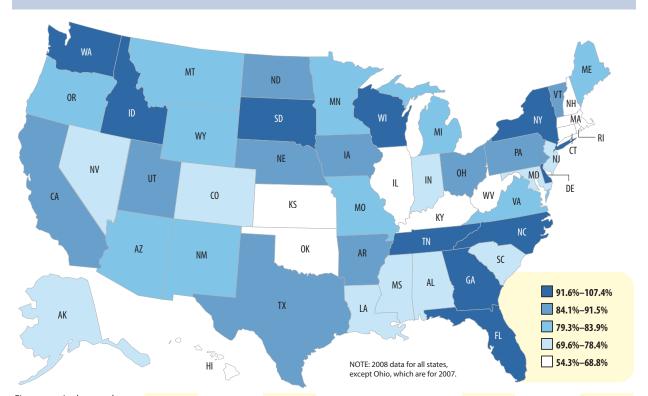
Alabama	Massachusetts
Alaska	Mississippi
Colorado	Nevada
Connecticut	New Hampshire
Hawaii	New Jersey
Illinois	Oklahoma
Indiana	Rhode Island
Kansas	South Carolina
Kentucky	West Virginia
Louisiana	Wyoming
Maryland	

In eight states—Connecticut, Illinois, Kansas, Kentucky, Massachusetts, Oklahoma, Rhode Island and West Virginia—more than one-third of the total liability was unfunded.

Two states had less than 60 percent of the necessary assets on hand to meet their long-term pension obligations: Illinois and Kansas. Illinois was in the worst shape of any state, with a funding level of 54 percent and an unfunded liability of more than \$54 billion.

• While states generally are more cautious about increasing benefits than they were in the early part of this decade, many have been lax in providing the annual funding that is necessary to pay for them. During the past five years, 21 states failed to make pension contributions that average out to at least 90 percent of their actuarially required contributions—the amount of money, determined by actuaries, that a state needs to pay in a current year for benefits to be fully funded in the long term.

Exhibit 1 STATE PENSION FUNDING LEVELS



Figures are in thousands.		Latest	Annual	Latest
State	Latest liability	unfunded liability	required contribution	actual contribution
Alabama	\$40,206,232	\$9,228,918	\$1,069,214	\$1,069,214
Alaska	14,558,255	3,522,661	282,656	300,534
Arizona	39,831,327	7,871,120	1,023,337	1,035,557
Arkansas	21,551,547	2,752,546	555,147	556,755
California	453,956,264	59,492,498	12,376,481	10,469,213
Colorado	55,625,011	16,813,048	1,141,081	779,644
Connecticut	41,311,400	15,858,500	1,248,860	3,243,647
Delaware	7,334,478	129,359	149,614	144,358
Florida	129,196,897	-1,798,789	3,005,387	3,130,378
Georgia	75,897,678	6,384,903	1,275,881	1,275,881
Hawaii	16,549,069	5,168,108	488,770	510,727
Idaho	11,526,600	772,200	256,400	285,400
Illinois	119,084,440	54,383,939	3,729,181	2,156,267
Indiana	35,640,073	9,825,830	1,232,347	1,275,191
lowa	24,552,217	2,694,794	453,980	389,564
Kansas	20,106,787	8,279,168	607,662	395,588
Kentucky	34,094,002	12,328,429	859,305	569,913
Louisiana	38,350,804	11,658,734	1,160,051	1,337,933
Maine	13,674,901	2,782,173	305,361	305,361
Maryland	50,561,824	10,926,099	1,208,497	1,077,796
Massachusetts	58,817,155	21,759,452	1,226,526	1,368,788
Michigan	70,354,300	11,514,600	1,249,909	1,392,709
Minnesota	57,841,634	10,771,507	1,036,509	767,295
Mississippi	29,311,471	7,971,277	662,900	643,356
Missouri	52,827,423	9,025,293	1,219,871	1,072,027

State	Latest liability	Latest unfunded liability	Annual required contribution	Latest actual contribution
Montana	\$9,632,853	\$1,549,503	\$201,871	\$211,914
Nebraska	8,894,328	754,748	169,068	169,068
Nevada	30,563,852	7,281,752	1,262,758	1,174,837
New Hampshire	7,869,189	2,522,175	251,764	189,134
New Jersey	125,807,485	34,434,055	3,691,740	2,107,243
New Mexico	26,122,238	4,519,887	667,691	591,279
New York	141,255,000	-10,428,000	2,648,450	2,648,450
North Carolina	73,624,027	504,760	675,704	675,056
North Dakota	4,193,600	546,500	80,928	59,900
0hio	148,061,498	19,502,065	2,632,521	2,369,045
Oklahoma	33,527,899	13,172,407	1,245,646	986,163
Oregon	54,260,000	10,739,000	707,400	707,400
Pennsylvania	105,282,637	13,724,480	2,436,486	986,670
Rhode Island	11,188,813	4,353,892	219,864	219,864
South Carolina	40,318,436	12,052,684	902,340	902,365
South Dakota	7,078,007	182,870	95,766	95,766
Tennessee	32,715,771	1,602,802	838,259	825,259
Texas	148,594,953	13,781,228	1,871,409	1,854,968
Utah	22,674,673	3,611,399	641,690	641,690
Vermont	3,792,854	461,551	83,579	78,743
Virginia	65,164,000	10,723,000	1,486,768	1,375,894
Washington	54,322,900	-179,100	1,545,600	967,900
West Virginia	13,642,584	4,968,709	481,703	510,258
Wisconsin	77,412,000	252,600	644,800	644,800
Wyoming	6,989,764	1,444,353	163,994	108,017

NOTE: All figures listed above for Ohio are for 2007. The 2008 contribution figures for Ohio are \$2,263,766 (actuarially required) and \$2,262,847 (actual). SOURCE: Pew Center on the States, 2010.

Health Care and Other Non-pension Benefits

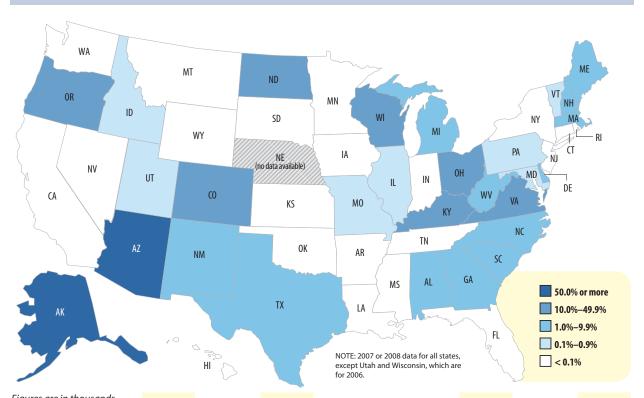
- Retiree health care and other non-pension benefits create another huge bill coming due: a \$587 billion total liability to pay for current and future benefits, with only \$32 billion—or just over 5 percent of the total cost—funded as of fiscal year 2008. Half of the states account for 95 percent of the liabilities.
- In general, states continue to fund retiree health care and other non-pension benefits on a pay-as-you-go basis—paying medical costs or premiums as they are incurred by current retirees.
 For states offering minimal benefits, this may cause little problem. But for those that have made significant promises, the future fiscal burden will be enormous.
- Only two states had more than 50 percent of the assets needed to meet their liabilities for retiree health care or other non-pension benefits: Alaska and Arizona (see Exhibit 2). Only four states contributed their entire actuarially required contribution for non-pension benefits in 2008: Alaska, Arizona, Maine and North Dakota.
- Both health care costs and the number of retirees are growing substantially each year, so the price tag escalates far more quickly than average expenditures. States paid \$15 billion for nonpension benefits in 2008. If they had started to set aside funding to pay for these long-term benefits on an actuarially sound basis, the total payments would have been \$43 billion.

Investment Losses and Future Implications

• The recession, which officially began in December 2007, dealt a severe blow to all state pension systems. In calendar year 2008, public sector pension plans experienced a median 25 percent decline in their investments. These losses generally

- are not fully reflected in the fiscal year 2008 data, because most state pension systems use a fiscal year that ends on June 30.
- A look at the 2008 investment losses for a selection of states suggests that despite the improvement in the market in 2009, the financial picture for states' retirement systems in fiscal year 2009 and beyond will be considerably worse (see Exhibit 3).
- All but three states—Idaho, Oregon and West Virginia—use a smoothing process in which investment gains and losses are recognized over a number of years. 10 Smoothing is a way of managing state expenditures by preventing contribution rates from suddenly jumping or dropping. The number of smoothing years varies, with five years being the most common. Because only a portion of the 2008 losses will be recognized each year, there is a great likelihood that pension funding levels will be dropping for the next four to five years. This is what happened after state pension systems sustained the less extreme investment losses associated with the market downturn of 2001-2003.11 Although investment returns were generally very good in 2004, 2005 and 2006, the funding levels for most pension systems continued on a downward path until 2007, when investment returns were strong and the bad years began to drop out of the calculations.
- Given the experience of the past decade, pension plan investment losses in 2008 raise the question of whether it remains reasonable for states to count on an 8 percent investment return over time—the most common assumption for all 231 state-administered pension plans examined for this report. Some experts in the field suggest that an assumed 8 percent yield is unrealistic for the near future. In addition, it will take consistently higher levels of investment returns over a number of years for states to make up their losses from 2008 and 2009.

Exhibit 2 STATE RETIREE HEALTH CARE AND OTHER NON-PENSION BENEFITS



Figures are in thousands.		Latest	Annual	Latest
State	Latest liability	unfunded liability	required contribution	actual contribution
Alabama	\$15,950,194	\$15,549,411	\$1,313,998	\$1,107,831
Alaska	9,146,629	4,032,052	558,041	600,003
Arizona	2,322,720	808,818	146,198	146,198
Arkansas	1,822,241	1,822,241	170,177	38,119
California	62,466,000	62,463,000	5,178,789	1,585,295
Colorado	1,385,954	1,127,179	81,523	25,877
Connecticut	26,018,800	26,018,800	1,718,862	484,467
Delaware	5,489,000	5,409,600	464,600	176,548
Florida	3,081,834	3,081,834	200,973	87,825
Georgia	19,100,171	18,322,123	1,583,008	422,157
Hawaii	10,791,300	10,791,300	822,454	299,466
Idaho	493,746	489,421	45,494	17,695
Illinois	40,022,030	39,946,678	1,192,336	159,751
Indiana	442,268	442,268	45,963	10,218
lowa	404,300	404,300	42,991	16,613
Kansas	316,640	316,640	16,039	5,105
Kentucky	13,008,572	11,660,245	1,051,372	259,912
Louisiana	12,542,953	12,542,953	1,168,087	269,841
Maine	4,399,800	4,347,702	164,045	196,053
Maryland	14,842,304	14,723,420	1,086,240	390,319
Massachusetts	15,305,100	15,031,600	838,700	701,992
Michigan	40,668,800	39,878,500	3,946,416	1,207,746
Minnesota	1,011,400	1,011,400	109,982	46,677
Mississippi	570,248	570,248	43,627	0
Missouri	2,867,472	2,851,826	262,215	151,629

State	Latest liability	unfunded liability	Annual required contribution	actual contribution
Montana	\$631,918	\$631,918	\$58,883	\$0
Nebraska does not	t calculate its liabi	lity for retiree l	nealth care and ot	her benefits.
Nevada	2,211,439	2,211,439	287,217	59,167
New Hampshire	3,229,375	3,054,188	268,848	112,038
New Jersey	68,900,000	68,900,000	5,022,100	1,249,500
New Mexico	3,116,916	2,946,290	286,538	92,121
New York	56,286,000	56,286,000	4,133,000	1,264,000
North Carolina	29,364,734	28,741,560	2,459,469	597,176
North Dakota	123,776	81,276	6,085	6,450
0hio	43,759,606	27,025,738	2,717,364	855,937
Oklahoma	359,800	359,800	48,200	0
Oregon	868,393	609,793	67,126	45,385
Pennsylvania	10,048,600	9,956,800	823,500	745,600
Rhode Island	788,189	788,189	46,125	28,378
South Carolina	8,791,792	8,638,076	762,340	241,383
South Dakota	76,406	76,406	9,429	3,505
Tennessee	1,746,879	1,746,879	167,787	63,140
Texas	29,340,584	28,611,584	2,236,952	592,507
Utah	677,499	672,843	53,969	53,289
Vermont	1,618,245	1,614,581	107,506	17,776
Virginia	3,963,000	2,621,000	541,163	446,321
Washington	7,901,610	7,901,610	682,797	156,294
West Virginia	6,362,640	6,108,398	174,842	143,582
Wisconsin	2,237,204	1,700,396	205,116	90,134
Wyoming	174,161	174,161	19,292	7,324

How States Have Responded

For many years, lawmakers in a number of states put off dealing with the challenges posed by their public sector retirement systems. But for many governors and state legislators, a convergence of factors has made the issues too critical to ignore. Policy makers that have underfunded their states' liabilities in the past now find they owe far more annually as a result—and if they postpone paying the bill any longer, the debt will increase even more significantly. This will leave their states, and tomorrow's taxpayers, in even worse shape, since every dollar needed to feed that growing liability cannot be used for education, health care or other state priorities. Steep investment losses in pension plan funds in the past two years signal that states cannot simply sit back and hope the stock market delivers returns large enough to cover the costs. Meanwhile, more and more baby boomers in state and local government are nearing retirement, and many will live longer than earlier generationsmeaning that if states do not get a handle on the costs of post-employment benefits now, the problem likely will get far worse, with states facing debilitating costs.

Momentum for reform is building. Fifteen states passed legislation to reform some aspect of their state-run retirement systems in 2009, compared with 12 in 2008 and 11 in 2007. States similarly enacted a series of reforms following the 2001 recession, with 18 states making changes in 2003, compared with only five in 2002 and nine in 2001.¹³ And many states are likely to explore options in their 2010 legislative sessions. At least a third of the states have study commissions, task forces or other research initiatives to examine the possibilities for reform.

Because there are legal restrictions on reducing pensions for current employees in most states, the majority of changes in the past two years were made to new employee benefits. Ten states increased the contributions that current and future employees make to their own benefit

Exhibit 3 INVESTMENT LOSSES IN 2008 FOR SELECT STATE PENSION PLANS

State	Plan name	2008 percentage investment loss
Pennsylvania	Pennsylvania State Employees' Retirement System	-28.7%
Ohio	Ohio Public Employees Retirement System	-26.8%
Pennsylvania	Pennsylvania Public School Employees' Retirement System	-26.5 %
California	California Public Employees' Retirement System	-23.0%
Illinois	Teachers' Retirement System of the State of Illinois	-22.3%
Oregon	Oregon Public Employees Retirement System	-22.2%
Indiana	Indiana Employees' Retirement Fund	-21.0%
Virginia	Virginia Retirement System	-21.0%
Maryland	State Retirement and Pension System of Maryland	-20.0%
Missouri	Missouri Public School Retirement System	–19.3%
New Jersey	New Jersey Division of Pensions and Benefits	-19.0%
North Carolina	North Carolina Retirement Systems	-14.0%
Georgia	Georgia Teachers Retirement System	-13.1%

systems, while ten states lowered benefits for new employees or set in place higher retirement ages or longer service requirements.¹⁴ (See Exhibit 4.)

Reforms largely fell into five categories: 1) keeping up with funding requirements; 2) reducing benefits or increasing the retirement age; 3) sharing the risk with employees; 4) increasing employee contributions; and 5) improving governance and investment oversight.

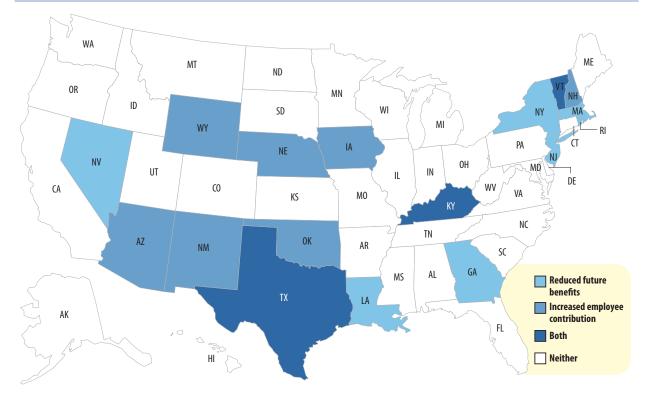
Keeping up with funding requirements

Generally, the states in the best shape are those that have kept up with their annual funding requirements in both good times and bad. In some states, such as Arizona, a constitutional or statutory requirement dictates that this payment is made. In early 2008, Connecticut issued a \$2 billion bond to help fund the

teachers' pension system, with a covenant that required the state to fully fund that plan based on actuarial assessments.

Making the payment required by actuaries is only part of the battle. States also need to make sure the assumptions used in calculating the payment amount are accurate—for example, estimating the lifespan of retirees or the investment returns they expect. As noted earlier, some states are now questioning whether, over the long term, investment return assumptions have been too optimistic. In 2008, Utah reduced its investment assumption from 8 percent to 7.75 percent, 15 and in 2009 the Pennsylvania State Employees Retirement System lowered its assumption from 8.5 percent to 8 percent. 16 Although the median investment return for pension plans over the past 20 years averaged over 8 percent, some experts in the field, including

Exhibit 4 STATE PENSION POLICY REFORMS, 2008–2009



renowned financier and investor Warren Buffett, believe even those assumptions are too high.¹⁷ By comparison, the Financial Accounting Standards Board requires that private sector defined benefit plans use investment return assumptions based on the rates on corporate bonds. As of December 2008 the top 100 private pensions had an average assumed return of 6.36 percent.¹⁸

Reducing benefits or increasing the retirement age Several states reduced benefits for new employees either by altering the pension formula or raising retirement ages.

In 2008 and 2009, Kentucky, Nevada, New Jersey, New York, Rhode Island and Texas reduced benefits offered to new employees or raised the retirement age, according to NCSL.¹⁹

For example, in Nevada, employees hired after January 1, 2010, will have their annual pension benefits calculated using a new formula. In the past, the state multiplied the number of years of service by 2.67 to derive the percentage of salary to be replaced by pension benefits. That number has dropped to 2.5 percent. Nevada's employees also will have to work until age 62, instead of age 60, to retire with 10 years of service.

New York lawmakers in December raised the minimum retirement age from 55 to 62 for new hires, increased the minimum years of service required to draw a pension from five years to 10, and capped the amount of overtime used in calculating benefits. Teachers have a separate benefit structure that raises the minimum retirement age from 55 to 57, boosts the employee contribution rate from 3 percent to 3.5 percent of annual wages and increases the 2 percent multiplier threshold for pension calculations from 20 to 25 years.²⁰

Rhode Island went a step further than other states by applying its change in retirement age to current workers, not just new ones. New workers will have a retirement age of 62, up from 60, while the minimum retirement age for current workers will depend on their length of service.

Overall, four states took legislative action to reduce retiree health care and other non-pension benefits for employees in 2008, and seven did so in 2009. Vermont, for example, changed the vesting period for receiving full health care benefits so that a new employee now has to work 10 years to receive 40 percent coverage on health premiums and 20 years to get the full 80 percent coverage. Employees hired before July 1, 2008, only have to work five years to qualify for 80 percent coverage.²¹

Some additional states reduced retiree health care benefits through administrative or executive branch actions. For instance, West Virginia's Public Employees Insurance Agency decided last summer that it would no longer pay its share of the premium for employees hired after July 1, 2010. It paid 71 percent of the costs for employees hired before that date. Several lawsuits have been filed in response.

In the past, some states such as Georgia, North Carolina and Tennessee required that any proposals that will affect pension benefits or costs receive a full actuarial analysis to determine its long-term price tag.²² This goes for changes in retirement ages, cost-of-living adjustments, any change in the time needed to vest in a system, or any adjustment to the pension formula. In 2008, California passed a law that requires both state and local decision-making bodies to review potential future costs before increasing any non-pension benefits. It also requires actuaries to be present when pension benefit increases are discussed.

Forcing policy makers to responsibly identify the cost and potential funding sources for benefit increases can help states avoid offering unfunded benefit hikes. State and local governments still can

offer or increase benefits, but this additional step ensures that costs will be thoroughly considered in advance. Although such reforms will not reduce existing liabilities, they can keep state policy makers from making the funding situation worse.

Sharing the risk with employees

A few states have taken a step toward sharing more of the risk of investment loss with employees by introducing benefit systems that combine elements of defined benefit and defined contribution plans. These hybrid systems generally offer a lower quaranteed benefit, while a portion of the contribution—usually the employees' share—goes into an account that is similar to a private sector 401(k). For example, Nebraska's "cash balance" plan, enacted in 2003, is described by one state official as a "defined benefit plan, with a defined contribution flair."23 As in a traditional defined contribution account, the employee's payout on retirement is based on what is in the account, not on a set benefit. But some protection is offered to employees through a guaranteed annual investment return of 5 percent.

In 2008, Georgia introduced its own hybrid system for new employees hired after January 1, 2009. The defined benefit portion provides about half the benefit of the plan for employees hired before that point, but there also is a defined contribution portion in which the state matches employee contributions in a 401(k)-style savings plan. New employees automatically are enrolled in the savings plan at a 1 percent contribution rate, but may opt out at any time.²⁴

No states moved completely away from defined benefit plans in the past two years.²⁵ The last two that took any steps in this direction were Alaska, which moved new employees to a defined contribution plan in 2005, and Michigan, which moved new state employees to a defined contribution approach in 1997. In light of severe investment losses in 2008 and 2009 that resulted in decreased pension funding levels, policy makers are once again openly discussing defined contribution plans. Louisiana lawmakers, for instance, are looking at the recommendations of a pension panel that studied making this switch.²⁶ Other states where this has been mentioned by policy makers include Florida, Kansas and Utah.²⁷ Because unions and other employee representatives often have vigorously opposed defined contribution plans, it is unclear whether any state will find such a switch viable, or if such plans are primarily being proposed as a starting point for hybrid plans or other compromises.

Increasing employee contributions

Employees already contribute about 40 percent of non-investment contributions to their own retirement. But states are looking toward their workers to pay for a larger share. In many states, the employee contribution is fixed at a lower rate than the employer contributions. But some states have more flexibility. In Arizona, for example, the pension system is designed so that general (non-public safety) employees and employers each pay equal shares of the annual contribution. If the employer contribution goes up, so does the employee's. According to Arizona pension officials, this tends to increase the attention that employees give to the health of the pension system and increases pressure to keep it well funded.28

Some states, such as Iowa, Minnesota and Nebraska, have the ability to raise employee pension contributions if needed. Iowa and Minnesota have been raising employee contribution rates in the past several years, and in 2009, Nebraska increased its employee

contribution rates for individuals in its defined benefit plans. Last year, New Mexico temporarily shifted 1.5 percent of the employer's contribution to employees.²⁹ New Hampshire and Texas increased payroll contributions required from new employees.³⁰

Several states also began asking employees and retirees to start making contributions for their retiree health care benefits. In 2008, Kentucky required new employees to contribute 1 percent of their pay to help fund their post-retirement health care and other non-pension benefits. In 2009, New Hampshire established a \$65 monthly charge for retired employees under 65 who are covered by retiree health insurance. And Connecticut will now require new employees, and current employees with fewer than five years of service,³¹ to put in 3 percent of their salaries.³²

Governance and investment oversight

In recent years, some states have sought to professionalize the complex task of pension investments by shifting oversight away from boards of trustees to specialized bodies that focus on investment. For example, Vermont moved investment oversight from its pension boards to an entity called the Vermont Pension Investment Committee, which includes a representative elected by each of three boards and the state treasurer as an ex-officio member.³³ The change was designed to bring a higher level of expertise to the body responsible for investing the pension assets, to combine the assets of the three retirement systems to realize administrative savings, and to be able to act more guickly when making changes to the actual investment allocations.

Pension systems also have continued to improve governance practices to ensure that the board of trustees is well trained, that the division of responsibilities between board and staff makes sense, and that the composition of the board is balanced between members of the system and individuals who are independent of it. Several pension reform commissions are considering reforms similar to those enacted by Oregon in 2003, heightening qualifications for trustees and shifting membership so that boards are not dominated by pension recipients.

In 2009, some reforms grew out of specific problems that states had with investment practices or because of ethical questions that were raised. Illinois, for instance, put in place a number of protections to ensure that pension trustees, employees and consultants are barred from benefiting from investment transactions. More competitive processes for procuring consulting and investment services were introduced, and the state's pension systems were required to review the performance of consultants and managers and to establish ways of comparing costs.³⁴

Grading the States

Based on all of this information, Pew graded all 50 states on how well they are managing their public sector retirement benefit. (See individual fact sheets for each of the 50 states at www. pewcenteronthestates.org/trilliondollargap.)

Pensions

Pew assessed states' pension systems on three criteria and awarded each state up to four points: two points for having a funding ratio of at least 80 percent; one point for having an unfunded liability below covered payroll; and one point for paying on average at least 90 percent of the actuarial required contribution during the past five years.

States earning four points were solid performers. Those earning two or three points were deemed

in need of improvement. And those earning zero or one point were labeled as meriting serious concerns.

Overall, 16 states were solid performers, 15 states were in need of improvement and 19 states were cause for serious concerns (see Exhibit 5). All 16 states that were assessed as solid performers had funding levels over the 80 percent threshold, had manageable unfunded liabilities, and had contributed on average at least 90 percent of the actuarially required contribution during the past five years. Eight states—Alaska, Colorado, Illinois, Kansas, Kentucky, Maryland, New Jersey and Oklahoma—received no points, having failed to make any meaningful progress toward adequately funding their pension obligations.

Exhibit 5 HOW ARE STATES DOING?

PENSIONS			
Grade	Number of states		
SOLID PERFORMER	16	AZ, AR, DE, FL, GA, ID, ME, MT, NE, NY, NC, OH, SD, TN, UT, WI	
NEEDS IMPROVEMENT	15	AL, CA, IA, MI, MN, MO, NM, ND, OR, PA, TX, VT, VA, WA, WY	
SERIOUS CONCERNS	19	AK, CO, CT, HI, IL, IN, KS, KY, LA, MD, MA, MS, NV, NH, NJ, OK, RI, SC, WV	

RETIREE HEALTH CARE	AND NON-PENSION BENEFITS		
Grade	Number of states		
SOLID PERFORMER	9	AK, AZ, CO, KY, ND, OH, OR, VA, WI	
NEEDS IMPROVEMENT	40	AL, AR, CA, CT, DE, FL, GA, HI, ID, IL, IN, IA, KS, LA, ME, MD, MA, MI, MN, MS, MO, MT, NV, NH, NJ, NM, NY, NC, OK, PA, RI, SC, SD, TN, TX, UT, VT, WA, WV, WY	

NOTE: Nebraska does not provide any estimates of its retiree health care and other non-pension benefits obligation.

SOURCE: Pew Center on the States, 2010.

Health Care and Other Non-pension Benefits

Pew's criteria for grading states' retiree health care and other non-pension benefit obligations were much simpler and more lenient than those used for the pension assessment. This is because states generally have set aside little funding to cover the costs of these obligations and because they only recently began to report on their non-pension assets and liabilities. In fact, states have an average funding rate of 7.1 percent—and 20 states have funded none of their liability.

Because most states have only recently begun to account for and address these liabilities, Pew's grades measure the progress they are making toward pre-funding future benefit obligations. As a result, a "serious concerns" grade was not included. Pew rated as solid performers states that were above average at setting aside funds to cover the bill coming due. States below average were identified as needing improvement.

Nine states earned the designation of being solid performers: Alaska, Arizona, Colorado, Kentucky, North Dakota, Ohio, Oregon, Virginia and Wisconsin. Only two of those—Alaska and Arizona—have set aside at least 50 percent of the assets needed. Forty states were in need of improvement, having put away less than 7.1 percent of the funds needed—and, as noted above, half of these have not set aside any funds at all. (Nebraska subsidizes retiree health benefits however the state has not calculated the amount of this obligation and therefore was not graded. See Exhibit 5.)

NOTES

- ¹ Pew Center on the States analysis of 231 state-administered pension plans and 159 retiree health care and other benefits plans. See Appendix A for more details on how data were collected and calculations were conducted.
- ² Keith Brainard, "Public Fund Survey Summary of Findings for FY2008," National Association of State Retirement Administrators, October 2009, p. 2. www.publicfundsurvey.org/publicfundsurvey/index.htm. (accessed January 29, 2010).
- ³ Pew Center on the States, *Promises with a Price: Public Sector Retirement Benefits*, December 2007, p. 6.
- ⁴ At the time of publication of the 2007 report, a full set of figures for 2006 was not available. As noted in the methodology, "latest available" is the plan year ending in 2008 for all states except for Ohio, which were not available at the time of publication.
- S National Conference of State Legislatures, *State Budget Update: November, 2009.* December 2009. Investment returns comprise between 70 percent and 80 percent of pension plan funding when times are good, with employee and employer contributions making up the rest. In bad investment years, such as 2002 and 2008, investment returns are negative and employees and employers contribute all the money that goes to cover pension plan costs. In general, approximately 60 percent of non-investment contributions to pension plans comes from employers and 40 percent comes from employees." Employee Benefit Research Institute, "Public Pension Plan Asset Allocation," Notes 30, no. 4. April 2009, p. 2; at http://www.ebri.org/pdf/notespdf/EBRI_Notes_04-Apr09.PblcPnsPlns1.pdf. (accessed on January 25, 2010).
- ⁶ Pew Center on the States researchers also took the extra step of cross checking our data with the Public Fund Survey (see www. publicfundsurvey.org/publicfundsurvey/index.htm), which collects pension data directly from the states.
- ⁷ U.S. Government Accountability Office, State and Local Government Retiree Benefits: Current Status of Benefit Structures, Protections and Fiscal Outlook for Funding Future Costs, report to the Committee on Finance, U.S. Senate, September 2007.
- ⁸ The funding levels in Alabama and Maryland were above 80 percent in 2006 but fell below 80 percent in 2008.
- ⁹ Keith Brainard, "Public Fund Survey Summary of Findings for FY2008," National Association of State Retirement Administrators, October 2009, p. 2. www.publicfundsurvey.org/publicfundsurvey/index.htm. (accessed on January 29, 2010).
- ¹⁰ Through 2008, Illinois also was among the small group of states in which asset value was assessed on a fair market basis. It shifted to a five-year smoothing period in 2009. Also, South Dakota smoothes its investment gains but accounts for its losses based on market value.

- ¹¹ Economic Report of the President: 2009 Report Spreadsheet Tables, Tables B95 and B96; accessed January 4, 2010, at http://www.gpoaccess.gov/eop/tables09.html. The market started to rebound by the end of calendar year 2003.
- ¹² "Warren Buffett Says That Pension Accounting Encourages Cheating," Bloomberg.com, July 17, 2009, accessed on December 4, 2009, at www.bloomberg.com/apps/news?pid=10000103&sid=a Cb9PTevRP3g&refer=news_index.
- ¹³ National Conference of State Legislatures, "Pension and Retirement Plan Enactments in State Legislatures," (2000 through 2009). www.ncsl.org/?tabid=13399.
- ¹⁴ Pew Center on the States analysis based on National Conference of State Legislatures, "Pension and Retirement Plan Enactments in State Legislatures," for 2008 and 2009, and a review of governors' and state legislative Web sites (October 1, 2009, to December 3, 2009), as well as interviews conducted June 1, 2009, to December 31, 2009.
- ¹⁵ This sounds like a minor change, but the impact is significant. This simple action reduced the state's funding level from 101 percent funded to 95 percent funded. An increase in the interest rate assumption to 8.5 percent would have caused the funding level to rise to 113 percent. The new interest rate assumption will cause contributions to go up in the short term, but Utah officials believe this is a more accurate portrayal of what the state will earn on its investments over time.
- ¹⁶ Pew Center on the States interview with Leonard Knepp, executive director, Pennsylvania State Employee Retirement System, June 24, 2009.
- ¹⁷ Median investment returns for public retirement plans between 1989 and 2008 are provided Callan Associates, a large investment consulting firm based in San Francisco, CA. "Warren Buffett Says That Pension Accounting Encourages Cheating," Bloomberg.com, July 17, 2009, accessed on December 4, 2009, at www.bloomberg.com/apps/news?pid=10000103&sid=aCb9PTevRP3g&refer=n ews_index. Mr. Buffett was referring to private sector pension assumptions.
- ¹⁸ Watson Wyatt, "Insider: Watson Wyatt Pension 100—2008 Disclosures of Funding, Discount Rates, Asset Allocations and Contributions," April 2009. www.watsonwyatt.com/us/pubs/insider/showarticle.asp?ArticleID=20764.
- ¹⁹ Pew Center on the States interview with Cynthia Webster, Vermont State Employees Retirement System, November 2, 2009.
- ²⁰ Governor David A. Paterson, news release, December 2, 2009, accessed December 4, 2009, at http://www.state.ny.us/governor/press/press_1202092.html.

- ²¹ National Conference of State Legislatures, "State Pensions and Retirement Legislation 2009," accessed December 4, 2009, at www. ncsl.org/?tabid=17594; *Pensions and Retirement Plan Enactments in 2008 State Legislatures*, accessed December 4, 2009, at http://www.ncsl.org/default.aspx?tabid=13313.
- ²² Pew Center on the States interviews with Michael Williamson, director, North Carolina Retirement System, September 2, 2009; Tommy Hills, chief financial officer, Georgia, November 18, 2009; and Jill Bachus, director, Tennessee Consolidated Retirement System, September 3, 2009.
- ²³ Pew Center on the States interview with Phyllis Chambers, director, Nebraska Public Employees Retirement Systems, October 6, 2009.
- ²⁴ E-mail from Pamela Pharris, executive director, Georgia Employees Retirement System, December 15, 2009.
- ²⁵ National Conference of State Legislatures, "State Pensions and Retirement Legislation 2009," accessed December 4, 2009, at www. ncsl.org/?tabid=17594; "Pensions and Retirement Plan Enactments in 2008 State Legislatures," accessed December 4, 2009, at http://www.ncsl.org/default.aspx?tabid=13313.
- ²⁶ Ronald K. Snell, "State Pensions and Retirement Legislation 2009," National Conference of State Legislatures, August 17, 2009. www. ncsl.org/?tabid=17594. (accessed on January 29, 2010).
- ²⁷ Bill Cotterell, "Fasano Says Goodbye Pensions, Hello Savings," *Tallahassee Democrat*, November 16, 2009; "Parkinson Puts Major KPERS Changes on the Table," *Lawrence (Kan.) Journal World* (Associated Press), September 10, 2009; "Lawmaker: Utah's Retirement System Must Change," *The Salt Lake City Tribune*,

- November 13, 2009; Barry Poulson and Arthur Hall, "The Funding Crisis in the Kansas Public Employee Retirement System," Center for Applied Economics, University of Kansas, September 2009.
- ²⁸ Pew Center on the States interview with Paul Matson, executive director, Arizona Retirement System, June 25, 2009.
- ²⁹ Pew Center on the States interviews with Donna Mueller, chief executive officer, Iowa Public Employees Retirement System, August 4, 2009; David Bergstrom, executive director, Minnesota State Retirement System, September 8, 2009; Phyllis Chambers, executive director, Nebraska Public Employee Retirement Systems, October 6, 2009; Terry Slattery, executive director, New Mexico Public Employees Retirement Association, September 14, 2009.
- ³⁰ National Conference of State Legislatures, "Pension and Retirement Plan Enactments in State Legislatures," accessed December 4, 2009, at http://www.ncsl.org/default.aspx?tabid=13313.
- ³¹ For employees with fewer than five years of service as of July 1, 2009, the 3 percent contribution will begin July 1, 2010.
- ³² E-mail from William Morico, Connecticut Retirement and Benefit Services coordinator, Healthcare Policy and Benefit Services Division, November 18, 2009.
- ³³ Pew Center on the States interview with Cynthia Webster, Vermont State Employees Retirement System, November 2, 2009.
- ³⁴ National Conference of State Legislatures, "State Pensions and Retirement Legislation 2009," accessed December 4, 2009, at www.ncsl.org/?tabid=17594.

The Bill Coming Due: A Trillion Dollar Gap

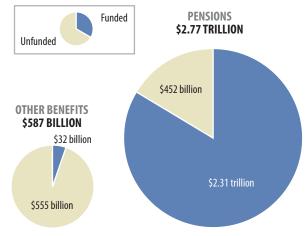
The Challenge

An analysis by the Pew Center on the States shows that states and participating local governments face a collective liability of more than \$3.35 trillion for the pensions, health care and other retirement benefits promised to their public sector employees. They have put away \$2.35 trillion in assets to pay for those promises—leaving a shortfall of more than \$1 trillion that state and local governments will have to pay in the next 30 years.³⁵ That amounts to more than \$8,800 for every household in the United States.³⁶ (See Exhibit 6.)

Pew's figure actually is conservative for two reasons. First, it counts total assets in states' public sector retirement benefit systems at the end of fiscal year 2008, which for most states ended on June 30, 2008—so the total does not represent the second half of that year, when states' pension

Exhibit 6 50-STATE RETIREE BILL

The pension bill is much larger than that of other benefits, but it is 84 percent funded; the bill for other benefits is only 5 percent funded.



SOURCE: Pew Center on the States, 2010.

fund investments were devastated by the collapse of the financial markets. Second, most states' retirement systems allow for "smoothing" of gains and losses over time, meaning that the pain of investment declines will be recognized over the course of several years. The funding gap will likely increase when that loss—more than 25 percent in calendar year 2008—is factored in.³⁷

Pensions

States' pension bills come due over time, including both benefits that will be paid out next year and those that will be provided several decades in the future. These long-term liabilities represent obligations to current employees and retirees that will keep growing over time—which is why assets need to be put aside now to cover them.

Actuarially Required Contribution

Also known as the annual required contribution, this is the amount of money that actuaries calculate the employer needs to contribute to the plan during the current year for benefits to be fully funded by the end of a span of time of up to 30 years, known as the amortization period. This calculation assumes the employer will continue making the actuarially required contribution on a consistent basis and that actuarial assumptions, such as investment returns and rates of salary growth, will be reasonably accurate. This contribution is made up of the "normal cost" (sometimes referred to as the "service cost")—the cost of benefits earned by employees in the current year—and an additional amount that will enable the government to reduce unfunded past service costs to zero by the end of the amortization period. Making the full or almost full actuarially required contribution in any given year signifies that a state is making a serious effort to pay its bill coming due. The total actuarially required contribution for all state-run retirement plans for fiscal year 2008 was \$64.4 billion. States paid 89.6 percent of that payment.

States know how much money they should be putting away each year to cover pension obligations for current and future public sector retirees. The "actuarially required contribution" is the amount of money that the state needs to pay to the plan during the current year for benefits to be fully funded in the long run, typically 30 years. Although it is called a "required" contribution, in many states funding is at the discretion of the legislature. In fiscal year 2008, states should have committed \$64.4 billion to their pension plans. They ended up paying just \$57.7 billion, or 89.6 percent, of that amount.

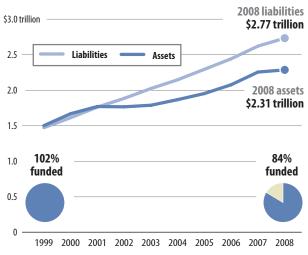
Pew's analysis shows that in fiscal year 2008, states' pension plans had \$2.8 trillion in long-term liabilities. Total liabilities have grown over \$323 billion since 2006, outpacing asset growth by more than \$87 billion. Pew found that, in the aggregate, states' systems in fiscal year 2008 were 84 percent funded. This is relatively good news: Many experts in the field, including the U.S. Government Accountability Office, suggest that a healthy system is one that is at least 80 percent funded. However, this is slightly down from an 85 percent funding level in fiscal year 2006. The actual shortfall, almost \$452 billion, is substantial.

One way to understand the magnitude of the unfunded liability is to compare it to the current annual payroll that is covered by the plan. States with a higher degree of excess are considered to have a higher burden. For fiscal year 2008, the unfunded liability exceeded covered payroll in 22 states. In four of these states, the excess was less than 10 percent. In seven states, the unfunded liability was more than twice the covered payroll.

The current pension shortfall reflects an overall downward trajectory in pension funding. In 2000, state-run pension plans were actually running a \$56 billion surplus. From 2000 to 2008, growth

Exhibit 7 PENSION FUNDING OVER TIME

Funding was strong in 1999 and 2000, but has since been declining.

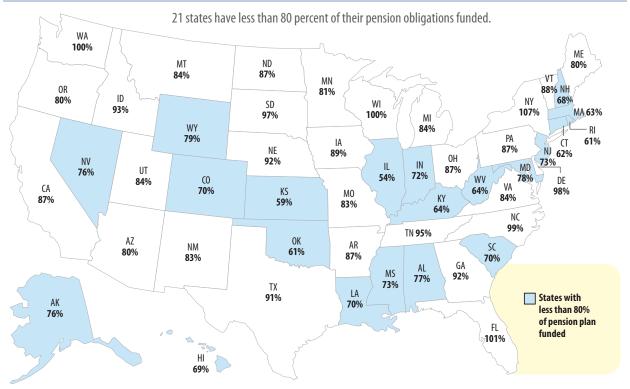


SOURCE: Pew Center on the States, 2010.

in pension liabilities had outstripped growth in assets by more than \$500 billion. In 2000, more than half the states were fully funded. By 2006, that number had shrunk to six states. By 2008, only Florida, New York, Washington and Wisconsin could make that claim. Furthermore, based on how investments have performed as well as on states' continuing shortfalls in making annual contributions, this trend will continue and the funding gap will grow if changes are not made (see Exhibit 7).

The aggregate numbers, while impressive, do not tell the whole story. States are performing dramatically differently in managing this bill coming due. States such as Florida, Idaho, New York, North Carolina and Wisconsin all entered the current recession with fully funded pensions. As a result, these states will be in a better position to keep their plans on a solid financial footing in the immediate future. But many other states are struggling. At the end of fiscal year 2008, 21 states had funding levels below the 80 percent mark, compared with 19 below that level in 2006 (see Exhibit 8).

Exhibit 8 LAGGARDS IN STATE PENSION FUNDING



SOURCE: Pew Center on the States, 2010.

In eight states—Connecticut, Illinois, Kansas, Kentucky, Massachusetts, Oklahoma, Rhode Island and West Virginia—more than one-third of the total liability was unfunded. Two states—Kansas and Illinois—had less than 60 percent of the necessary assets on hand to meet long-term pension obligations at the end of 2008.

Here is a snapshot of some of the states that had profound difficulties even before the Great Recession:³⁹

• Illinois. The state in the worst shape in fiscal year 2008 was Illinois. With a combined funding level of 54 percent, the five pension systems of Illinois had accumulated a total liability of \$119 billion, \$54 billion of which was unfunded. To start closing that gap and covering future expenses, the state should have made an actuarially required payment of \$3.7 billion in 2008. Instead,

it contributed a little less than \$2.2 billion, meaning that the state will face a bigger gap in 2009 even apart from investment losses. For Illinois, the unfunded liability is more than three times annual payroll costs.

• Oklahoma. The seven state-administered pension systems had a combined funding level of 60.7 percent in fiscal year 2008, a total liability of \$33.5 billion and an unfunded liability that was 219 percent of total payroll. During the 1980s and 1990s Oklahoma increased benefits, but did not boost contributions enough to offset those increased liabilities. 40 By pushing the costs into the future, the state's actuarially required contribution has risen to almost 21 percent of payroll, annually. In addition, the state has lagged in making the required contributions, so funding levels would likely have continued on a downward path even without investment losses.

- Rhode Island. The four pension systems administered by Rhode Island had a combined funding level of 61.1 percent in fiscal year 2008, with a total liability of \$11.2 billion and an unfunded liability that is close to three times payroll. While the state has made its actuarially required contributions in recent years, it is still trying to catch up. Rhode Island essentially operated its pension systems on a pay-as-yougo basis for nearly 40 years, ending that practice in the late 1970s. The state recently increased the retirement age, instituted a new tier of lower benefits for new employees and tightened up requirements for disability pensions, among other changes.
- Connecticut. With a combined funding level of 61.6 percent, Connecticut's three pension systems had a total liability of \$41.3 billion in fiscal year 2008 and an unfunded liability that is nearly four and a half times its annual payroll cost. Its current funding level reflects an improvement in the teachers' pension system, which received an infusion of cash in 2008 from a \$2 billion, 24-year pension bond that was issued that year.⁴² The state's current collective bargaining agreement lasts until 2017, which limits reform options.
- Kentucky. Kentucky's six pension systems had a combined funding level of 63.8 percent, and a total liability of \$34 billion in fiscal year 2008. The Bluegrass State had an unfunded liability that was 234 percent of payroll. In 2000, the plans were well funded at 110 percent, but years of the state substantially underfunding its actuarially required contribution, plus significant benefit increases, led the funding level to plummet. This problem was compounded by unfunded, automatic cost-of-living adjustments for retirees' pensions and incentives that were offered for early retirement.⁴³

• Hawaii. The Hawaii Employees Retirement

System had a funding level of 68.8 percent, a total liability of almost \$16.6 billion in fiscal year 2008 and an unfunded liability that was about one and one-third times its payroll. Hawaii had several problems that contributed to its underfunded pension status. Its legislature diverted about \$1.7 billion from annual contributions in the early years of this decade. Also, until 2006, all employees were in a non-contributory system, which means they did not pay anything for their pensions. This system is being phased out, with a new contributory plan that began in 2006.

Retiree Health Care and Other Non-pension Benefits

Retiree health care and other non-pension benefits represent the other half of the challenge facing states: a \$587 billion long-term liability, with only 5.44 percent of that amount, or almost \$32 billion, funded as of fiscal year 2008.

Pew found that only two states have more than 50 percent of the assets needed to meet their liabilities for retiree medical or other non-pension benefits: Alaska and Arizona. An additional 19 states have funded between 1 percent and 50 percent of the assets needed to pay for these benefits (see Exhibit 9). Only four states contributed their entire actuarially required contribution for non-pension benefits in 2008: Alaska, Arizona, Maine and North Dakota.

For many years, states offered their retirees health care benefits without ever identifying the long-term costs. That changed in 2004 when the Governmental Accounting Standards Board created statements 43 and 45 that required governments to report on their long-term liabilities for retiree health care and other non-pension benefits.⁴⁴ Pew's 2007 report, *Promises*

with a Price, provided the first 50-state assessment of the cost of these benefits by compiling valuation figures for large state plans.

As much as state pension systems vary, the range of liabilities for non-pension benefits is even greater. Some states, including Iowa, Kansas, North Dakota, South Dakota and Wyoming, have very minimal obligations. They generally do not provide retirees with help in paying premiums, but such states may allow retirees to be on the same plan as active employees, thereby incurring some costs associated with having older plan members who are likely to have more health problems. Other states, such as Arizona, Florida, Oklahoma and Virginia, have controlled costs by capping the amount of benefits paid.45 Still others have developed different ways of handling this issue. For example, lowa allows retiring employees to use a sick leave balance to buy into the employee health plan for the period before they are eligible for Medicare.46

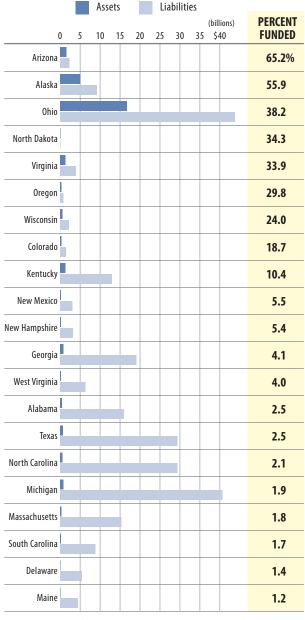
Some states have liabilities that are very large. In fact, a couple of the states with the largest retiree health liabilities also have the most underfunded pension systems. Connecticut has a \$26 billion retiree health care liability with no funding set aside as of 2008 to deal with that long-term bill, and Hawaii has an unfunded \$10 billion liability. Illinois has a nearly \$40 billion liability with only \$75 million in funding set aside.

Unlike pensions, states generally continue to fund retiree health and other non-pension benefits on a pay-as-you-go-basis—paying health care costs or premiums as they are incurred by current retirees. Some state officials argue that these liabilities are not as daunting as the pension bill, because there are fewer legal barriers to changing benefits or increasing employee contributions for retiree health care benefits. Still, because both medical costs and the number of retirees grow

substantially each year, costs escalate far more quickly than average expenditures. States paid \$15 billion for non-pension benefits in 2008. If they had funded these benefits on an actuarially sound basis by putting away adequate money to pay for future benefits, the total payments should have been \$43 billion.

Exhibit 9 RETIREE HEALTH CARE AND OTHER NON-PENSION BENEFITS FUNDING

For all states that are at least 1 percent funded.



While paying more now may sound like an unattractive option to states, it will keep costs from jumping substantially in the future. A 2007 study found that if Nevada continued to follow a pay-asyou-go approach, the \$49 million annual cost in 2009 would grow to \$105 million a year in 2015.⁴⁷ Similarly, barring any change in benefit structure, Maine's \$94 million annual payment in 2009 would grow to \$151 million a year in 2015.⁴⁸ New Jersey's retiree health benefit plans were expected to pay out \$1.4 billion in 2009 for medical care and drug costs; this would more than double to \$3.1 billion in 2017 assuming no major reforms occurred.⁴⁹

The Implications

In states with severely underfunded public sector retirement benefit systems, policy makers often have ignored the problem in the past. Today's decision-makers and taxpayers are left with the legacy of that approach: high annual costs that come with significant unfunded liabilities, lower bond ratings, less money available for services, higher taxes and the specter of worsening problems in the future.

To some extent, even with significantly underfunded systems, problems still can be put off. But policy makers who choose this course will leave their states—and tomorrow's taxpayers—in even worse shape. Each year that lawmakers delay taking action aggravates the problem in the future, putting the state at risk of major increases in annual costs.

Rhode Island's auditor general vividly illustrated the problems with a severely underfunded pension system in an audit released several years ago.⁵⁰ The report pointed out that the City of Cranston's Police and Fire Employees Retirement System had paid \$21.7 million in 2006 for 505 individuals, the vast majority already retired. By contrast, the 110 local units of Rhode Island's Municipal Employees Retirement System collectively paid \$20 million that year for plans that covered more than 14,000

individuals. Cranston's system was only 15 percent funded in 2006, while the units in the Rhode Island municipal system were 87 percent funded on average. At that point, the Cranston plan had run out of options. It had 98 active members and 407 retirees who legally had to be paid. By putting off payments for so long, the city eventually faced a debilitating annual bill.

To prevent situations like this, actuarially sound pension systems ensure that employees and employers contribute sufficient money on an annual basis to cover benefits that are earned that year. Those payments—"normal costs"—are calculated by actuaries using a variety of assumptions about investment rates, retiree life span, salary growth and many other factors.

In the rare instances where a plan has little or no unfunded liability, these normal costs make up the entirety of the actuarially required contribution. In those cases, as long as pension benefits are moderate, the annual contribution to the plan is a relatively low percentage of the plan's covered payroll. In North Carolina, for example, the actuarially required contribution was \$675.7 million or 3.2 percent of payroll in fiscal year 2008. In Wisconsin, it was \$644.8 million or 5 percent of payroll.

Unfunded liabilities develop when governments fail to provide funding as benefits are earned and also when inaccurate assumptions are used to calculate payment amounts. For states with underfunded pension systems, those annual costs become more expensive. That is because a second payment is added to the actuarially required contribution that is intended to eliminate the unfunded liability over a period of no more than 30 years, according to rules set by the Governmental Accounting Standards Board. In Connecticut, with its large unfunded liability, the aggregate actuarially required contribution for the three state-administered pension systems was nearly

\$1.25 billion or 35.3 percent of payroll in fiscal year 2008. For Nevada's three systems, it was almost 1.3 billion or just over 24 percent of payroll.

When states do not meet the actuarially required contribution, the unfunded liability continues to rise (see Exhibit 10), and required payments in future years grow even larger.

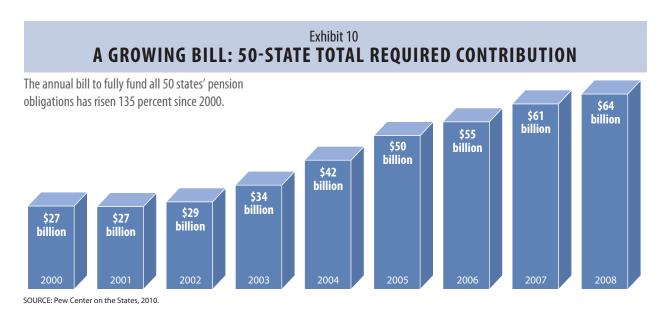
The latest figures show that collectively states fell significantly short of their actuarially required contributions, skipping some \$6.6 billion in pension payments and almost \$28.2 billion in payments for retiree health care and other non-pension benefits. At the same time, unfunded pension liabilities went up by \$87.8 billion. To cover this added amount during the next 30 years, assuming 8 percent investment returns, states will have to pony up an additional \$7 billion in payments each year.

As the number of retirees increases over time, extremely underfunded systems confront an additional problem: their assets need to be kept more liquid to pay benefit checks. As a result, investment opportunities that can prove advantageous to a large investor with a long horizon are closed off. In Kentucky, the pension system's cash flow problems "definitely impact our

ability to recover," said Mike Burnside, executive director of the Kentucky Retirement Systems. "If you have to focus on shorter-term investments and more liquid assets, you can't take advantage of the longer yield over the longer period of time."⁵¹

The Pressure Mounts

Some underfunded pension systems already were straining to increase contributions prior to the Great Recession. These increased contributions fall on the state and other public sector employers. For Oklahoma's state employers, for example, the state's pension contribution rates have been going up about 1 percentage point a year for the past five years. They are still falling short of what is necessary to meet actuarial demands. By 2010, the contribution reaches 15.5 percent of payroll, and current law has it topping out at 16.5 percent in 2011.52 Illinois was able to contribute only about 58 percent of the \$986.4 million it should have set aside in fiscal year 2008—and the burden continues to grow. For fiscal year 2010, Illinois' employer contribution went from 21.5 percent to 28.4 percent of payroll for the State Retirement Systems, which include state employees, judicial employees and the General Assembly.53



In the vast majority of states, the effect of significant investment losses from 2008 and early 2009 have not yet been fully factored into contribution rates. But given the extent of the losses, it is likely that even states that have funded their pension plans well in the past will face large increases in annual payments.

Oregon provides a unique early warning of the impact of the dramatic drop in pension investments. It is one of 15 states in which the 2008 asset valuations for at least some of the plans were calculated as of the end of the calendar year and, as a result, show the effects of the devastating second half of the year. In addition, Oregon, like Idaho and West Virginia, calculates its pension assets based on fair market value. All the other plans smooth out their investment gains and losses over a set number of years, recording only a portion of the impact each year.54 This means that Oregon took the full brunt of its 27 percent loss in 2008—while other states' funding levels will likely continue to drop for the next four or five years, as the major losses experienced in 2008 and the first quarter of 2009 are gradually incorporated.55

Oregon's loss contributed to a massive drop in its pension funding level, from 112 percent in 2007 to 80 percent in fiscal year 2008. While the state's pension liabilities went up by almost \$1.4 billion, the state's assets dropped by \$15.8 billion. Oregon went from having a pension surplus of \$6.5 billion to having an unfunded liability of \$10.7 billion. Paul Cleary, executive director of the Oregon Employees' Retirement System, expects that because of investment losses, its employer contributions will rise from 12 percent of payroll paid in the state's current biennium to 18 percent⁵⁶ of payroll in the 2011–2013 biennium, about a \$750 million increase.⁵⁷ "When we look at cumulative investment returns over the last 10-year period, it was worse than the decade that included the Great Depression," said Cleary.

The critical question for states is whether the investment returns of the past two years are anomalous or whether they signal a fundamental change in how the markets will be operating.⁵⁸ As with other state systems, Oregon's returns in 2009 have been considerably better, at 13.8 percent as of September 30, 2009.⁵⁹ But even if their returns continue to improve, states will take a very long time to recover the ground they lost. Barry Kozak, an actuary and faculty member of the Center for Tax Law and Employee Benefits at the John Marshall Law School in Chicago, was asked to determine how long it would take for a pension fund to recover from a one-time, 24 percent loss in value. Kozak said the fund would have to make 16 percent in annual investment returns for the next five years to accumulate as much as would have been accrued if they had consistently received the historically anticipated 8 percent rate of return over the same period of time.⁶⁰

Montana provides a good example of what states are up against in trying to recover using investment returns alone. The investment loss for the state's Public Employees' System was 20.7 percent in fiscal year 2009 and 4.9 percent in fiscal year 2008, said Carroll South, executive director of the Montana Board of Investments. But because the pension fund also did not make its expected 8 percent rate of return, the shortfall is really almost 28.7 percent and almost 12.9 percent for each of those fiscal years respectively.⁶¹

The almost unavoidable upcoming increases in employer contributions could not come at a worse time. These actuarial demands have hit just as states' revenues have been squeezed by the recession. Employer contributions come out of the same pot of money that funds education, Medicaid, public safety and other critical needs. Between the start of the recession in December 2007 and November 2009, states faced a combined budget gap of \$304 billion, according to the National Conference of State Legislatures (NCSL).⁶² Budgets have continued

to deteriorate in the current fiscal year,⁶³ with more than half of the states scaling back spending in response to ongoing shortfalls.⁶⁴ And revenues are expected to continue to drop still more during the next two years.⁶⁵ Under these conditions, many states have been and will continue to be forced to make difficult decisions about where to invest their limited resources.

The Roots of the Problem

The recession exacerbated the challenges—but many states entered the recent downturn with fundamental weaknesses in their retirement systems that stemmed from earlier mistakes and decisions. States that were prudent in the past might ride out this financial storm without being forced to make drastic changes, but those that were not likely will have to make some painful choices.

A number of factors contributed to the problems states now face. Pew examined four of the most significant: (1) the volatility of pension plan investments; (2) states falling behind in their payments; (3) ill-considered benefit increases; and (4) other structural issues.

The Volatility of Pension Plan Investments

As noted earlier, in calendar year 2008, the median investment loss for public pension funds was 25.3 percent.⁶⁶ For the vast majority of states, this extensive loss was not fully factored into the fiscal year 2008 financial documents used for Pew's analysis. The gap between assets and liabilities when data from fiscal year 2009 are released will be even more alarming.

In fiscal year 2009, retirement systems in such states as Tennessee, New Jersey, North Carolina, Oklahoma and West Virginia lost between 14 percent and 16 percent;⁶⁷ the California Public Employees Retirement System's (CalPERS) investments declined by 24 percent;⁶⁸ the Louisiana Teachers System lost nearly 23 percent;⁶⁹ and New Mexico's Public Employee

Retirement Association lost more than 24 percent. These losses represent massive drops in asset levels; CalPERS' 24 percent loss, for instance, equated to a \$57 billion drop.⁷⁰ "There was no place to hide," said Terry Slattery, executive director of the New Mexico fund.⁷¹

FOCUS ON: PENNSYLVANIA

Pennsylvania offers a useful case study of a state affected by the volatility of pension plan investments. In the 1990s, Pennsylvania had robust investment returns, which encouraged leaders to dramatically raise retirement benefits. This amounted to a 25 percent increase for Pennsylvania employees and teachers in 2001, with subsequent cost-of-living increases for retirees.⁷² At the time, Pennsylvania's pension system was funded at more than 126 percent, so it appeared that the increases could easily be absorbed. But the dot-com bust, 9/11 and the attendant stock market drop occurred from 2001 to 2003, all of which led to a decline in pension assets. To prevent a major increase in annual contributions, state leaders decided to account for investment losses and gains on two different time frames. The gains from the 1990s were spread out over 10 years while the losses and the costs for increased pension benefits were spread out over the next 30 years.

Pennsylvania officials were optimistic that strong investment returns would diminish and perhaps erase entirely the impact of the spike in employer payments that was expected.73 For a while, that looked as if it were happening. By the close of 2007, both the state employees' and school systems had four years of good investment returns, including a more than 17 percent yield in calendar year 2007.74 Then came 2008 and enormous across-theboard investment declines. The Pennsylvania State Employees Retirement System lost more than 28 percent of its assets in that year. As a result of these investment losses as well as the state's unorthodox funding approach, officials in Pennsylvania's state employee pension system are projecting a jump in contribution rate from 4 percent of payroll today to 28.3 percent in the fiscal year that begins July 1, 2012, and 31.3 percent the following year. 75 If Pennsylvania were required to make that jump today, the state would need to find an extra \$1.38 billion to pay the 2012 rate and an extra \$1.55 billion to pay the 2013 rate.

Back in the 1970s, state pension systems generally relied on conservative investments that delivered a low but relatively consistent rate of return. During the next several decades, however, pension systems loosened up their restrictions on making investments in equity, real estate and, more recently, private equity. In 1990, 38 percent of pension plan assets were invested in equities, broadly defined. By 2007, equity investments accounted for 70 percent of all state pension plan assets, according to Federal Reserve Board data.⁷⁶

In the 1990s, states enjoyed strong returns and pension assets shot up so dramatically that by 2000, some pension funds began to lower contribution rates because they were over-funded. But the experience of the early part of this decade and the past two years, in particular, provided state officials with a vivid view of the downside of the more aggressive investment strategies that many states adopted.

The double blows of negative investment returns in 2008 and the first quarter of 2009 shattered expectations and sent pension boards and staff into waves of self-examination even after returns began to resuscitate after March 2009. Are investment expectations, typically around 8 percent, set too high? Are investment portfolios properly diversified? Has the drive for greater returns subjected pension systems to excessive risks? Solid, data-based answers are still few and far between.

Falling Behind in Payments

A new pension system can make a variety of attractive promises at what appears to be a relatively low cost because, at first, the number of retirees who collect benefits is small.

Pension systems with really severe problems often started out as "pay-as-you-go" plans in which retirees derived their benefits from current state revenues, not any pool of accumulated cash. Inevitably, the number of retirees grew relative to the number of current

employees, and the checks going out the door took up a larger and larger portion of state revenues. Indiana's State Teacher Retirement fund is a good example. In 2007, when it had its latest actuarial valuation, it was only about 45 percent funded. Before 1996, there was no intent to fund this plan. Only after that year was a new pension system designed that was based on actuarially sound practices.⁷⁷ The same problem affects Rhode Island's severely underfunded Employees Retirement System, which operated essentially on a pay-as-you-go basis from 1936 to the late 1970s. It still is only about 57 percent funded even though it has made 100 percent of its actuarial contributions since the early 1980s. "You're paying for the sins of the past," said Frank Karpinski, executive director of the Rhode Island system. Little attention was paid in the early years to actuarial questions; in those days, you passed legislation and asked questions later, Karpinski said.78

As state pension systems matured, they moved away from a pay-as-you-go approach to one in which benefits are funded as they are earned. As noted above, actuaries in each system calculate the annual required contribution based on the normal cost and a portion of the unfunded liability. But in the vast majority of states, legislatures set the amount that is paid, which may differ substantially from the actuarially required contribution. In tough economic times, this may be one of many decisions a legislature makes in prioritizing expenditures. But states also made limited contributions when times were flush. During the past five years, 21 states failed to make pension payments that averaged out to at least 90 percent of their actuarially required contributions. "You need to make contributions in all market environments," said Michael Travaglini, executive director of the Massachusetts Pension Reserves Investment Management Board.⁷⁹

States often have given themselves a funding holiday in response to favorable investment returns. By 2000, fully half of the states had reached 100 percent funding of their pension systems, due to the

strong market performance of that decade. At the time, it seemed as if pension funding could only go in one direction: up. Governments such as Kentucky, New Jersey and Oklahoma began to pull back on their contributions. "Maybe a decade ago the system was over 100 percent funded," said Burnside, executive director of the Kentucky Retirement Systems. "It is easy when you're building government budgets to say, 'We don't need to contribute to the retirement plan because they have all the money they need,' and you start backing off of your retirement contribution." 80

FOCUS ON: OKLAHOMA AND NEW JERSEY

In the late 1990s, Oklahoma's Public Employees
Retirement System's 12.5 percent employer contribution
rate exceeded its actuarially required contribution.
The legislature wanted to find a way to finance a state
across-the-board pay increase—so it cut the employer
contribution to 10 percent of payroll, providing money
for raises for state agencies. Investments turned sour in
the early 2000s, costing the state assets it had counted
on. The contribution rate stayed at 10 percent through
fiscal year 2005, while liabilities continued to go up.⁸¹ In
2004 and 2005, the state's payments covered less than
60 percent of the required contribution.

In New Jersey, with a pension system that was about 106 percent funded in 1998, the state legislature began to dramatically underfund its annual contributions. Between 2000 and 2006, the state never exceeded 30 percent of the required contribution. By 2008, the total funding level had fallen below 73 percent. Recently defeated Governor Jon Corzine (D) emphasized the need to improve the state's pension situation and increased funding in 2007 and 2008, but during the financial crisis, the resolve to do a better job of supporting the pension system all but vanished. According to Frederick Beaver, director of the New Jersey Division of Pensions and Benefits, New Jersey was supposed to pay about \$2.3 billion in 2009 but contributed just \$105 million. For 2010, the amount required was about \$2.5 billion, but just \$150 million was budgeted. "There was just not money to go around for everything," said Beaver. "Any time that I see less than a fully funded contribution I get really worried, but all we can do is emphasize our concerns."82

Until the Governmental Accounting Standards Board set a new standard for financial reporting in 2004, most governments did not even calculate the long-term impact of offering retiree health care and other non-pension benefits, and only a few were actually putting aside any funding.⁸³ As noted earlier, Pew's 2007 report, *Promises with a Price*, was the first to report the assets and liabilities of all 50 states' non-pension benefit systems. Pew's current analysis found that in fiscal year 2008, only Alaska, Arizona, Maine and North Dakota met their actuarially required contributions for these systems.

Unfunded Benefit Increases

Once a state promises a retirement benefit, it is extremely difficult to take it away. This is true in every state in the country, albeit to varying degrees. In general, pension benefits that already have been earned have strict constitutional or contractual protections, although the right to continue to accrue benefits going forward is slightly less certain, according to Keith Brainard, research director for the National Association of State Retirement Administrators.⁸⁴ In some states, retiree health benefits also are protected.85 Even in states that have more flexibility to change benefits for current employees, the political difficulties are formidable. No legislature wants to antagonize government employees who, at the least, vote in elections and, at worst, can turn into powerful political foes. There also is a question of fairness. Should employees who have been counting on retirement benefits and who have considered them to be part of ongoing compensation suddenly discover that those benefits have disappeared?

Despite the difficulty of retracting benefits once they are given, some states made the commitment to significantly increase benefits, particularly in the 1990s and in the early part of this decade. There are various reasons for this; for instance, some states have raised employee benefit levels in lieu of raising salaries but they were inattentive to the cost of added benefits.

For instance, when Oklahoma increased benefits in the 1980s and 1990s, leaders simply did not focus on the size of the unfunded liability that was building up, according to Tom Spencer, executive director of the Oklahoma Public Employees Retirement System. "Frankly, I don't think our legislature was paying attention to the actuarial statistics when passing legislation. It is obvious that in some local plans and some state plans, the benefits have just gone way too high," Spencer said. "[E]very government needs to be able to afford the pensions they've promised. In Oklahoma, there's been a gigantic disconnect between what's been promised and what they're willing to pay."⁸⁶

From 1999 to 2002, Mississippi increased its pension benefits substantially without putting in place a funding mechanism. "A lot of people were riding that wave of euphoria from investment returns," said Pat Robertson, executive director of the Mississippi Public Employee Retirement System. The Much of the increase in benefits came in the form of unfunded cost-of-living increases to retirees. Retirement formulas also were changed for current employees, effectively providing an unfunded retroactive benefit increase. By 1998, the Mississippi Public Employee Retirement System was about 85

Increasing Benefits

There are several ways in which benefits can be raised. Most of them are tied to altering one of the factors involved in the calculation of the amount retirees receive. This formula includes some measurement of an employee's final average salary, the number of years worked and a pension multiplier (for each year worked, employees receive a certain percentage of their final salary as an annual benefit). The cost of the benefits also is affected by the age at which employees are allowed to retire, the length of time it takes to vest in the system, and the state's policy toward cost-of-living increases. Any unplanned increase will throw off past actuarial calculations of the funding necessary to support the system.

percent funded, with full funding envisioned in a little less than 10 years. In 2008, the funding level had dropped to about 73 percent, with full funding now almost 30 years away. The actuarially required contribution vaulted from \$362 million in 2000 to nearly \$637 million in fiscal year 2008.

For a long time, New Mexico periodically granted benefit increases in lieu of salary increases, creating a benefit structure that became one of the most generous in the country. One notable aspect of New Mexico's pension systems has been its early retirement age: general employees can retire with full pensions after 25 years of service at any age, and law enforcement personnel can retire at any age with only 20 years of service.88 New Mexico's funding level has dropped from 96 percent in 2000 to nearly 83 percent now. The actuarially required contribution was about \$334 million in 2000; today it is more than \$667 million. In addition, a significant lobbying push by the state's municipalities led to the removal of the cap on what individuals could earn if they retired and returned to government work. Without the cap, workers could earn both a full salary and a full pension simultaneously. The case to permit retirees to return to work was strengthened by shortages in police departments. But the legislation was not limited to public safety—the income caps for retirees who returned to work were removed for everyone.89

Similar stories abound in the realm of non-pension benefits. In Vermont, back in the 1970s, employees had to work for 10 years before they qualified for either pensions or retiree health care. But the vesting period was lowered to five years in 1981. In 1991, the state began to allow employees to retire at age 62 with no vesting requirement. This meant an employee could work for the state a few months, and as long as he or she retired directly from state employment, Vermont would pay 80 percent of medical premiums for the employee and spouse

for the rest of their lives and for other dependents until they reach an age at which they are no longer covered, according to Cynthia Webster, director of the Vermont State Employees Retirement System.⁹⁰

Vermont went back to a five-year vesting period in 2004 and, in 2008, put reforms in place that further pulled back on retiree health care offerings for new employees. Individuals hired after July 1, 2008, now must work 10 years before they receive retiree health benefits, and the state will pay 40 percent of the premium at that point, escalating to 60 percent

at 15 years, and finally 80 percent after 20 years of service. Employees hired before the reforms are still covered under the old arrangement.⁹¹

The urge to provide benefit increases has abated a good deal, following the sobering increase in unfunded liabilities after the 2001–2003 stock market downturn. But given that the market will eventually recover, there will likely come another day when states are tempted to increase benefits again. The lessons learned in the past provide important considerations for policy makers.

FOCUS ON:

In 2008, Colorado's aggregate pension funding level—the combined results for state, school, judicial and local employees that are part of the state-administered system—dropped to just under 70 percent from slightly more than 75 percent the previous year. Like most states, Colorado smoothes out investment losses—in its case, over four years. So the state's 2008 funding figure takes into account only about 25 percent of the losses sustained in 2008, with the rest to be factored in over the next three years. Even if the state has reasonably solid returns going forward, it is likely that its funding level will continue to drop through 2012 at least.

Before the economic downturn, the state developed a plan to reach full funding within 30 years, which included a gradual increase in actual contributions, but the decline in state revenues coupled with the loss of investment income derailed those plans.

The dramatic decline from Colorado's 105 percent funding level in 2000 can be attributed to three factors:⁹³

- 1. Increased benefits. In the late 1990s, Colorado made several benefit enhancements, including automatic cost-of-living increases for retirees and a drop in the age of normal retirement from 55 to 50 with 30 years of service. 4 Colorado's liabilities increased by 115 percent since 1999, rising from nearly \$26 billion to almost \$56 billion in fiscal year 2008. Meanwhile, the state's assets increased by only 45 percent, growing from nearly \$27 billion in 1999 to almost \$39 billion in fiscal year 2008.
- 2. Missed contributions. Up until 2002, the state paid its contributions regularly. But the dot-com bust and investment losses in the early part of this decade led to a jump in required contributions that the state could not meet. Over the past six years, the state paid only between 50 percent and 70 percent of its actuarially required contribution, for a total of \$2.4 billion in payments that were skipped.⁹⁵ These missed payments are added to future payments with the result that the contribution requirement goes up. The required contribution was more than 11 percent of payroll in 2004 and had grown to about 17.9 percent of payroll in 2008. While the plans paid \$2.8 billion in actual benefits to retirees in 2008, contributions that came in from employers and employees amounted to only \$1.6 billion.⁹⁶
- 3. Investment losses. In calendar year 2008, Colorado's investment losses were 26 percent, generally on par with other retirement systems. On a fair market basis, the state's pension funds had a decline of \$11 billion. But all of the calculations that are made by the state's actuaries—including the estimate of the annual funding needed—are based on the idea that the state will see returns of 8.5 percent annually. This means, in effect, that the state lost not only \$11 billion, but also the \$3.46 billion it was expecting to earn that year to stay even.

Other Structural Issues

A number of other factors—many of them self imposed by states—have made it even more difficult for states to keep up with the needs of current workers and retirees.

Pew examined five significant factors—early retirement, cost-of-living adjustments, sharing excess returns, double dipping, and spiking final salaries—that impact states' current challenges.

1) Early retirement

In tough times, governments often offer incentives to encourage early retirement to reduce the size of the workforce. In 2009, this action was taken by Vermont, Maine and Connecticut. He workforce this may cut personnel costs in the short term, the positions often end up being filled again, while the retirement system ends up with increased expenses over time. Special early retirement programs turn pension plan enrollees into beneficiaries sooner than expected or may offer additional benefits as an enticement to leave. This disrupts actuarial assumptions and adds years of retirement benefits for each individual who signs up.

Connecticut has had a series of early retirement programs, allowing employees with at least 10 years of service to retire at age 52 instead of 55, or providing employees with credit for three extra years of service if they were already at least 55. "These incentive programs really whacked the system," said Jeanne Kopek, assistant director of the Connecticut Comptroller Retirement Services Division. The state ran early retirement programs in 1991, 1997, 2003 and again in 2009. It added an additional 3,800 people to the pension payroll this year that had not been planned. "This may save money on the normal budget, but it is on the back of the retirement system," said Kopek. "You're not really saving anything. You're taking from Peter to pay Paul."98

2) Cost-of-living adjustments

States that offer a regular cost-of-living adjustment to retirees often will incorporate the annual increase into their actuarial calculations. This may be expensive, but at least actuaries know it is coming and have factored the increased pension checks into their calculations of liabilities and adjusted funding requirements to cover the additional amount. Some states, however, offer cost-of-living adjustments on an ad-hoc basis, introducing an additional strain on the pension system because it has not been accounted for. For example, a 2 percent cost-ofliving increase in 2008 in Georgia added \$188 million of unfunded liability into the pension system, according to Pamela Pharris, executive director of the Georgia Employees Retirement System. The Georgia legislature passed a law this past year that ends cost-of-living adjustments for newly hired state employees when they retire. "If you're coming in the door and you know you won't get a COLA [cost-ofliving adjustment] when you retire, you won't be planning on it," said Pharris.99

3) Sharing excess returns

Some pension systems have run into trouble because their retirement systems were designed to credit employees with additional retirement earnings when times were good, but did not take any money away when times were bad. That was the idea behind Oregon's now frozen money match system, in which employees' 6 percent contributions were placed in a member account and guaranteed an 8 percent annual return. If the actual return from state pension investments was more than 8 percent, the increased amount was credited to their account.

If the state had not credited the accounts with the surplus returns, then good years and bad years should even one another out, and the state could hope to have sufficient cash in reserve to fund the 8 percent guarantee in bad years. But when returns that exceeded the 8 percent annual return

assumption were credited to member accounts rather than reserved, there was no way to balance the down years with good years. In the robust years of the late 1990s, Oregon's 30-year career retirees got a windfall, with many ending up with pensions that exceeded their final salaries. The pension system itself was well funded until the market downturn of 2001–2003 sent investment returns into a tailspin. In early 2003, state projections showed the pension system dropping from 100 percent funded to 65 percent funded. At that time, substantial reforms were introduced, the state took out a pension bond to cover some of its unfunded liability, and the money match system was frozen. Subsequent member contributions were diverted to new accounts, and the state ended the practice of crediting amounts above an 8 percent return to members and began to put excess returns from good years in reserve instead. 102 While Oregon's reforms were challenged legally, the state prevailed on most points. 103

4) Double dipping

One of the major issues that is likely to surface in state legislatures in the next two years centers around retirees who are given their pensions and then come back to work for a new salary.¹⁰⁴ This practice, often dubbed "double dipping," has attracted a lot of attention in the press and has become a public relations issue for many state governments.

In Utah, the legislative auditor released a report in November 2009 saying that the number of state retirees who were returning to work had grown from 125 individuals in 1995 to 2,166 in 2008. The report identified a \$401 million cost impact on the state stemming from retirees returning to work between 2000 and 2008 and identified an \$897 million impact during the next 10 years if laws are not changed. The state of th

Utah, however, is not alone in wanting to retain experienced and talented staff eligible

for retirement. States have created Deferred Retirement Option Plans (DROP) in an attempt to avoid the rise in costs with paying both a pension and salary to a worker. DROPs are designed to help retiring employees stay in their jobs for a fixed amount of time, perhaps a year or two, to train and transfer knowledge to other employees. These programs keep them on salary and allow them to save in special accounts the pension benefits they would have been earning if not working. DROP plans can be hard to design and controversy has ensued regarding the ways these programs are used. In Arizona, for instance, the legislature passed a DROP about seven years ago, but repealed it a year or two later, before it ever went into effect, after a study demonstrated that the new program would require a \$45 million annual increase in employer contributions. 107

5) Spiking final salaries

Another issue that has caused concern is the way final salaries—a key element of the pension formula—are calculated. Pension benefits are supposed to reflect the employee's salary level and are thus based on the worker's wages in the final years of his or her employment. Workers have found ways to boost their salaries in those final years, greatly increasing the level of benefits to which they are entitled. Common ways to boost salaries include ensuring that overtime goes to the most senior workers, saving sick leave and getting temporary promotions or last-minute raises. When states allow such actions to occur, retirees who manipulated the system get a higher benefit and states suddenly face an increased liability. In Delaware in 2008, newspaper reports detailed ways in which correctional officers' overtime payments led to higher pension benefits. 108 Georgia recently cracked down on agencies that were giving large raises to employees at the end of employment as a way of increasing pension benefits. 109

The Road to Reform

Factors Driving Change

A convergence of factors is creating growing momentum for reforms to states' public sector retirement systems. In the past two years, states have suffered from enormous budgetary troubles. As noted in Pew's November 2009 report, *Beyond California: States in Fiscal Peril*, every state except for North Dakota and Montana encountered budget shortfalls in fiscal year 2010.¹¹⁰ In the last quarter of fiscal year 2009, state tax collections were 16.6 percent below the same period in 2008. In total, tax collections dropped \$63 billion or 8.2 percent from the previous year, according to the Nelson A. Rockefeller Institute of Government.¹¹¹ Through the fall, revenues in 31 states were coming in below already lowered expectations.¹¹²

As noted earlier, states' pension systems will suffer from their recent investment losses for many years to come. These losses affected virtually every large state pension system in the country,¹¹³ sending assets plummeting and leading some policy makers and experts in the field to question longstanding assumptions about asset growth.¹¹⁴

The financial pressures add to other forces that are creating a groundswell for reform. One impetus for change comes from increasing public awareness of the gulf between retirement benefits in the public and private sector—a gap that continues to grow. According to the Bureau of Labor Statistics, 86 percent of state and local government employees participate in a retirement plan compared with 51 percent of private sector workers. Defined benefit plans also are far more prevalent in the public sector. While only 20 percent of private sector employees have access to defined benefit plans, 90 percent of public sector employees do. Page 116

This gap in coverage, and the fact that taxpayers are asked to fund benefits that they often lack themselves, has created a politically potent push to alter the status quo. In the midst of the budget crisis facing states, several business groups and organizations advocating for smaller government have sought to generate public outrage around what they perceive to be largesse for government workers. The California Foundation for Fiscal Responsibility, for example, launched a campaign in 2009 to publicize the benefits of 5,115 public sector employees whose pension benefits top \$100,000.117 (The California Public Employees Retirement System countered the resultant onslaught of newspaper stories by arguing that the average annual payment was \$23,820.118) In Illinois, the Civic Committee of the Commercial Club of Chicago came out with a series of reform ideas in summer 2009 centered around lowering pension benefits, requiring pension and retiree health contributions from all employees, requiring retirees to pay a greater share of health plan costs and increasing the retirement age. 119 The Civic Committee pointed out that many companies have turned away from defined benefit plans and that "state retirees currently receive more generous pension benefits than those available to Illinois taxpayers."120

Public opinion polls in several states indicate these arguments might be finding traction. A poll last fall in California, for instance, showed that a majority of registered voters supported reducing pension benefits for new workers.¹²¹ In Illinois, the percentage of voters in favor of cutting state spending on worker pensions was nearly 40 percent in 2009, an increase of more than 15 percentage points since 2008.¹²²

THE ROAD TO REFORM

At the same time, the media focus on public sector retirement systems has sharpened. One analysis identified 524 newspaper articles written in 2008 on state pensions compared with 399 in 2007 and only 169 in 1998. 123 A particular focus of these articles has been on scandals and abuses in state systems. While there is no evidence of rampant abuse through the retirement systems of the 50 states, specific incidents have received significant press attention. Recently, stories have appeared on alleged pay-to-play arrangements in New York, 124 and salary spiking in Massachusetts 125 and California. 126

Some factors driving interest in reform are the same ones that Pew described in its *Promises with a Price* report in December 2007. The explosion of the baby boom generation into the ranks of retirees is causing a major demographic shift. By 2030, one in five Americans will be over 65.¹²⁷ People also are living longer. Life expectancy at birth was 70 for an American born in 1960 and 78 for someone born in 2005. A 65-year-old in 1950 could expect to live 14 more years. Someone of that age in 2005 could expect to live 19 more years.¹²⁸

This increased lifespan has dramatic effects on the expense of retiree benefits. For example, when Hawaii reviewed and analyzed the data and actuarial assumptions used for the five-year period ending June 30, 2005, it found that retirees were living longer and employees were retiring earlier than projected. This information, coupled with higher salary growth than expected, meant that even with 100 percent of the actuarially required contribution funded, the state still would fall behind on the money needed to fund its pension system. The Board of Trustees requested that the legislature increase the employer contribution rate from 13.75 percent to 15 percent of payroll for general employees and from 15.75 percent to 19.7 percent for police officers and firefighters. In 2007, the legislature agreed

to make the change, effective July 1, 2008. At the time, the legislature also passed a three-year moratorium on benefit increases until 2011. 129 With these kinds of accumulated pressures, many states are considering reforms. This is a topic that can no longer be put off until some uncertain tomorrow. Policy makers, particularly those in states with extremely underfunded systems, are increasingly concerned about their problems now.

It is not an easy topic to tackle. In 2008, nearly four of every 10 state and local government employees belonged to unions, a rate higher than any other workplace sector in the nation. Historically, unions have fought hard against any infringement to the compensation they have received, although there may be signs of compromise in the air. (See "Unions and Reform" sidebar on page 32.)

In addition, state constitutions and statutes generally protect pension benefits, and judges frequently have held that states cannot modify pension contracts with existing employees. "[O]nce granted, a pension is a contractual obligation of the employer, so that in most states it is impossible to cut the promise of a future benefit," said Ron Snell, director of the State Services Division at the National Conference of State Legislatures in Denver.¹³¹

While these prohibitions appear to be ironclad in most states, some pension officials noted areas in which there is distinct uncertainty. "There are some pretty gray areas in the legal environment," said Meredith Williams, executive director of the Colorado Public Employees Retirement Association. "If you have someone with a number of years in the system, can you change their accrual of benefits going forward? Good question. Can you change the rate at which they contribute going forward? That's also an interesting question. There are significant gray areas in the legal thinking and not a lot of case law." 132

THE ROAD TO REFORM

UNIONS AND REFORM

In a number of states, notably those with strong unions, public sector retirement benefit reform has been a struggle, whether the obstacles come directly from the unions or through elected officials who are committed to defending state workers' benefits.

In New Mexico, for example, public employee unions filed a lawsuit after state lawmakers in 2009 hiked existing employee contributions to their pension fund and reduced the state's share of the cost to save \$43 million a year. Arcy Baca, president of the American Federation of State, County and Municipal Employees (AFSCME) Local 477 in Santa Fe, said that while the union understands the state's budget predicament, the additional 1.5 percent in pension contributions taken from employee paychecks amounted to a tax increase on state employees. 133 Similarly, at least seven of Rhode Island's public employee unions have threatened to challenge the pension reforms enacted by the state legislature in 2009, which established a minimum retirement age of 62 and changed the way final salary is calculated for workers eligible to retire October 1, 2009. The reforms are supposed to save the state \$59 million in the budget year that ends June 30, 2010. The unions objected that the new provisions apply to employees who are vested with more than 10 years in the system.¹³⁴

But some experts say there may be a greater willingness among unions to accept pension plan changes now than any time in the recent past. Gary Chaison, a professor of industrial relations at Clark University in Massachusetts, said he believes state employee unions eventually will accept reforms especially because most of them apply to new hires. "During hard times, there's a greater union flexibility on pensions," he said. "Workers are pragmatic in their judgment about what they agree to change for future retirees before changing for themselves." 135

Nevada is an example of a heavily unionized state that was able to overcome objections to alterations in the pension plan. For about 15 years, unions had blocked attempts by business leaders to persuade the legislature to trim retirement and health benefits for new hires, ¹³⁶ but the state's \$3 billion budget gap for the 2009–2011 biennium helped set the stage for change. ¹³⁷

In Fall 2008, Clark County Commission Chairman Rory Reid (D) convened a meeting of top union officials in Las Vegas to tell them current labor costs were unsustainable. ¹³⁸ At the same time, the 7,000-member Las Vegas Chamber of Commerce, the state's largest business group, mobilized to persuade lawmakers to overhaul the pension system. Kara Kelly, the chamber's executive director, said business leaders believed Nevada had one of the most generous plans in the nation but needed an outside expert "to see if our hunches were true." ¹³⁹ The analysis that followed, by Hobbs, Ong and Associates and Applied Analysis, a Las Vegas-based consulting firm, concluded that Nevada public employees had among the nation's highest average salaries and favorable retirement benefits. ¹⁴⁰ The chamber presented the study to a legislature already looking at deep cuts to programs and services and the prospect of tax increases.

The path to reform was eased as different sides of the political spectrum gave ground. The Chamber of Commerce dropped its longstanding support of a defined contribution plan for public sector employees and endorsed a broad tax increase package to help balance the state budget. Republican lawmakers said they would support a tax increase but only if Democrats agreed to tighten the pension system for new hires. The budget passed. 141 Under the reform, new workers cannot begin receiving benefits until age 62, while current employees can retire at 60 with 10 years' service or at any age with 30 years. The plan also reduces the cost-of-living adjustment and the multiplier used to calculate benefits after an employee retires. 142 Union officials also played a role in negotiating this deal. 143

Nevada Senate Majority Leader Steven Horsford (D) called the pension reforms "a major shift" for new state employees. Asked how hard it was to oppose unions by agreeing to the reforms, Horsford said, "We can't protect all sacred cows. Otherwise, you can't meet all essential government services such as education and health care." 144

This deal was possible because concerns related to retirement security of workers were addressed along with the need to control costs. Union officials say that other states often fail to ask hard questions about how the systems are managed or what led to the unfunded liabilities before they turn to unions for givebacks or major alterations. The real test, said Gerri Madrid Davis, director of the National Public Pension Coalition, is whether states are willing to look for solutions that address both employees' needs and pension funds' sustainability.¹⁴⁵

Promising Approaches: Setting the Stage for a More Secure Future

A growing number of states are showing interest in exploring policy options to address the bill coming due for their public sector retirement benefit obligations. Given the size of the bill and the challenges to reform, there are no quick fixes—but there is considerable momentum for change. This momentum stems not only from the fiscal and social pressures described earlier, but also from the track record of states that have moved forward to reduce the cost of their systems while still providing retirement security to their employees.

A Menu of Reforms

States have several different ways to improve their retirement systems and more than one viable path to success. In 2009, 11 states, established a task force or study commission or asked an existing entity to examine options and make recommendations for reform.¹⁴⁶ Other groups previously set up were finishing their work—for example, a special pension commission in Massachusetts released its final report in October,147 and a Maryland commission on retiree health care is expected to release its final report in December 2011. 148 At least five other states were exploring changes through ad-hoc studies in the legislature or the pension administration or through reviews of benefits and pension structure by boards of trustees. 149 "We want legislators and stakeholders to understand the set of choices they have," said North Carolina Treasurer Janet Cowell, who launched such a commission. "What would a good system look like? What's a reasonable amount of money for retirement? Can we support 40-year retirements? What should the retirement age be? Then, how do we fund it?"

Exhibit 11 PAYING THE BILL, OR NOT

The 10 states that most recently paid the highest percentage of their annual required contribution for pension plans—and the 10 states that paid the lowest percentage.

10 LEADING STATES

Connecticut		259.7%
Louisiana	115.3%	
Massachusetts	111.6%	
Idaho	111.3%	400 !!
Michigan	111.1%	100 percent indicates fully funding the annual
Alaska	106.3%	required contribution.
West Virginia	105.9%	
Montana	105.0%	
Hawaii	104.5%	
Florida	104.2%	

10 LAGGING STATES

74.0%
74.0%
68.3%
66.3%
65.9%
65.1%
62.6%
57.8%
57.1%
40.5%

SOURCE: Pew Center on the States, 2010.

Based on an examination of states' policy changes and practices over time, Pew identified five key reforms that largely have proven politically feasible and that offer the opportunity to improve the performance of public sector retirement systems in both large and small ways.

Keeping Up with Funding Requirements

The make or break factor for keeping a retirement system well funded is to pay the actuarially required contribution consistently (see Exhibit 11).

Several of the states that pay the full amount required each year for their pension systems

have statutes or even constitutional requirements that dictate this practice. Arizona, for example, has a constitutional requirement that provides for full funding of the pension system each year. Tennessee has a similar statute in place. In Alaska, where many employees are still on a defined benefit plan, employer contributions are set in statute at 22 percent of payroll for the Public Employees Retirement System and at 12.6 percent for the Teachers Retirement and Pension System. Funding contributions go both to pensions and retiree health care, making Alaska one of the few states to provide ongoing funding for non-pension long-term obligations. When the statutorily set

employer contribution rates fall short of what actuaries require, another Alaska law requires the state to make up the difference.¹⁵²

In 2008 and 2009, in the midst of a severe budget crisis, other states were unlikely to create new rules requiring themselves to make full payments. Connecticut was an exception—in early 2008, the state issued a \$2 billion bond to help support the underfunded teachers' pension system, with a covenant that required the state to fully fund that plan based on actuarial assessments as long as the bonds are outstanding.¹⁵³

PENSION OBLIGATION BONDS

One of the options many states consider when their pension obligations appear to be careening out of control is the use of pension bonds. With these instruments, a state or local government can borrow money from investors in the bond market for up to 30 years and put it in its pension fund. The lump sum the government receives from the sale of the bonds is then invested with the intent of generating a highenough return to adequately fund the pension plan and perhaps even raise additional cash. (Similar bonds can be used to pay for retiree health care benefits.) Of course, states run the risk that their actual returns will be lower than expected—and lower than their borrowing costs. In that case, they may end up losing billions on these deals.

Alaska, Illinois and Wisconsin authorized either their state retirement system or localities to issue such bonds to pay for retiree benefits in 2008 and 2009.¹⁵⁴ Other states authorized the use of bonds in earlier years. As a result of the pressures caused by dwindling investment returns and looming budget gaps, a number of states likely will be considering pension obligation bonds. For these states to make sensible decisions about the use of such instruments, they must avoid the temptation to use the bonds as a way to paper over their recent investment losses and make their plans appear to be in good shape. The Government Finance Officers Association recommends that "state and local governments use caution when issuing pension obligation bonds." ¹⁵⁵

Simply put, states need to muster convincing evidence that the timing is right. According to Girard Miller, a

senior strategist for retirement plans and investments with the PFM Group, retirement bonds "should only be issued during recessions or during the early stages of economic recovery, when stock prices are depressed." Based on Miller's analysis, state governments that want to use retirement obligation bonds should be ready to issue them in the near future to ride out the eventual recovery.

Pension obligation bonds are sensitive to market conditions, and the net return can vary from year to year. Illinois, for example, sold \$10 billion in pension obligation bonds in 2003. Following four years of robust returns, it looked like the state had made a wise investment decision. But as returns have faltered, the decision appears somewhat more questionable. Based on results through March 2009, the return on the money invested from the bonds falls short. While it will be impossible to assess the ultimate success or failure of the bonds without knowing what future investment returns will be, the experience of Illinois and other states illustrates the risky nature of these financial instruments.

Some states have viewed pension bonds as an opportunity for reform. Connecticut issued \$2 billion in pension obligation bonds for its teachers' retirement system in early 2008. These bonds came attached with a strict covenant binding the state to adequately fund the plan. This approach has the potential to improve how states and municipalities manage their retirement obligations by making sure appropriate contributions are consistently made.

In a related issue, several states moved to change their assumptions of returns on their investment funds to more accurately estimate their long-term funding needs. For example, in 2008, Utah shifted from an 8 percent interest rate assumption to 7.75 percent, and in April 2009, the Pennsylvania State Employees Retirement System lowered its assumption from 8.5 percent to 8 percent. 158 As noted earlier, some experts believe even those reduced rates are still unrealistically high. Assuming a lower rate of return increases the actuarially required contribution because the state expects investments to cover less of the cost. More conservative investment assumptions protect states from sudden increases in contributions when investment returns fail to meet expectations. Plans vary in how risky or conservative their investment assumptions are. The assumed rates of return of the largest plan in each state ranges from 7.25 percent to 8.5 percent (see Exhibit 12).

Pension officials interviewed by Pew generally agreed about the desirability of keeping contributions consistent from one year to the next.

	Exhibit 12	
INVESTMENT	RETURN	ASSUMPTIONS

Rate	Number of states at that rate		
7.25 %	2	NC, SC	
7.50%	7	GA, IN, IA, KY, TN, VA, WV	
7.75%	7	CA, FL, ID, ME, MD, SD, UT	
7.80%	1	WI	
8.00%	22	AL, AZ, AR, DE, HI, KS, MI, MS, MO, MT, NE, NV, NM, NY, ND, OH, OK, OR, PA, TX, WA, WY	
8.25%	6	AK, LA, MA, NJ, RI, VT	
8.50%	5	CO, CT, IL, MN, NH	

SOURCE: Pew Center on the States, 2010.

A state that has accomplished this—and put itself on much better fiscal footing—is Ohio. The state's maximum pension contribution was set in statute at 14 percent of payroll for general employees in the Ohio Public Employees Retirement System—one of five statewide systems. In many years, this has exceeded the actuarially required contribution. But the state took the extra money and put it aside to fund future retiree health care benefits. 159 While most other states were ignoring the long-term liability for those obligations, Ohio was continuing to save. The result is that its nonpension liabilities were 38 percent funded in 2008, one of the best performances among states that provide meaningful post-retirement benefits other than pensions. Still, like most states, Ohio's public pension funds suffered double-digit investment losses after the Wall Street collapse in 2008, and lawmakers are discussing a series of cost-cutting reforms this year, including reduced benefits and higher employer contributions.

While the recession kept many states from their plans to follow through on funding of non-pension benefits, Pew's research shows that a handful began to set aside money between 2006 and 2008. New Mexico increased its funding from \$0 to \$170 million or 5.5 percent of its actuarial liability. New Hampshire increased its funding from \$0 to \$170 million or 5.4 percent of its actuarial liability. Georgia went from \$0 to 4 percent funded with contributions of \$778 million. Virginia now has 33 percent of its modest long-term needs in hand, compared with 23 percent in 2006.

Lowering Benefits and Increasing the Retirement Age

Even small changes to the benefits offered can have significant effects on liabilities over the long term. For example, in 1989, when Minnesota raised the retirement age by one year, from 65 to 66, for its three major retirement systems—moving in the opposite direction of many other states—it saved

\$650 million over the next 20 years. The savings accelerated over time; while the change affected only new employees, 70 percent of the current workforce was hired after 1989. 160 If states want to realize substantial savings through changing the benefits for new employees, they need to enact these policies sooner rather than later.

According to NCSL, in 2008 and 2009 Kentucky, Nevada, New Jersey, New York, Rhode Island and Texas reduced benefits offered to new employees or raised the retirement age. In Nevada, employees hired after January 1, 2010, will have their annual pension benefits calculated using a new formula. In the past, the state multiplied the number of years of service by 2.67 to derive the percentage of final salary to be replaced by pension benefits. That "multiplier" has been dropped to 2.5 percent. Nevada's employees will have to work until age 62 with 10 years of service, instead of age 60.161 In 2008, the Kentucky legislature passed a series of reforms to the pension benefits of new employees. Salaries no longer will be calculated based on the highest five years of pay, but rather, the final five years. The legislature also implemented a graduated tier system for new employees that establishes a sliding scale of multipliers for calculating benefits, ranging from 1.1 percent for 10 years of service to 2 percent for 30 or more years, and rewards employees for staying with the state.

In West Virginia, the Finance Board of the Public Employees Insurance Agency decided last summer to stop paying part of the health premium for retirees in the future. This would affect anyone hired after July 1, 2010. The agency picks up 71 percent of retirees' health premiums for employees hired before that point. The American Federation of Teachers of West Virginia and the West Virginia Education Association have filed lawsuits contesting this action.¹⁶²

Another reform is aimed at ensuring that the financial ramifications of any future benefit increases are thoroughly considered. This includes cost-of-living increases, adjustments to retirement ages, vesting periods, employee contributions and multiple other changes that can affect longterm pension or retiree health liabilities. Georgia, North Carolina and Tennessee, for example, require that any proposal that will affect pension benefits or costs receive a full actuarial analysis to determine the long-term price tag. 163 Last year, a two-pronged request for an increase in benefits for members of the Tennessee Retirement System was rejected by the state legislature. A fiscal note revealed a \$114 million first-year cost and a longterm tab of \$1.7 billion. 164

In 2008, California passed a law that requires both state and local decision-making bodies to review potential future costs before increasing any non-pension benefits. It also requires actuaries to be present when pension benefit increases are discussed. Other states, such as South Dakota and West Virginia, have established laws that prohibit adding benefits unless the pension system reaches a pre-set level of funding.¹⁶⁵

Sharing Risk with Employees

Some of the states in which pension systems are in better fiscal shape have developed ways to share at least some of the risk of investment volatility with employees. Wisconsin, for instance, has substituted a dividend process for standard cost-of-living increases. If the investment returns are positive in a year, the system can declare a dividend that gets paid to retirees. But this is not guaranteed. If a good year is followed by a year with poor investment returns, retirees can see their pensions reduced. In fact, in May 2009, pensions were reduced by 2.1 percent in Wisconsin for all members who had received prior dividends. The only guarantee is the base benefit. "We spent a long time educating our

members that they are at risk. They understand it," said Dave Stella, secretary of the State of Wisconsin Department of Employee Trust Funds. "They understand the risk and reward feature. They're more than happy to take the gains, and they know they also have to take the reductions." 167 Wisconsin's system was nearly 100 percent funded as of fiscal year 2008.

States also share risk through hybrid systems that combine elements of defined contribution and defined benefit plans. While defined contribution plans place all investment risk in the laps of employees, these hybrid plans share the risk. They provide a lower guaranteed benefit to retirees, but accompany that defined benefit element with a defined contribution element that does not guarantee any returns—similar to the 401(k) programs that are common in the private sector.

Nebraska provides one example with its cash balance system (see sidebar, "States to Watch"). Georgia lawmakers voted in 2008 to establish a hybrid retirement plan for state employees hired after January 1, 2009. The program offers a defined benefit plan that provides about half of the benefit of the existing plan. New employees also will be automatically enrolled in the 401(k)-style plan at a 1 percent contribution rate, but may opt out at any time.¹⁶⁸

In 2003, Oregon shifted to a hybrid pension plan for individuals hired after August 29 of that year, which provides substantially less than what the state offers employees hired before that date. All employees bear the risks for investments on the 6 percent salary contribution they make to the pension account. Before the change, pension system liabilities grew at 10 percent to 12 percent a year. The new plan has cut that to 3 percent a year. Of course, there has been a tradeoff, as employees have had to bear stock market

losses. The \$2.2 billion that had been set aside in member investment accounts—the defined contribution part of the benefit—dropped to \$1.6 billion in 2008.¹⁶⁹

Another option for states is to switch entirely to a defined contribution plan, although in recent years states have shied away from moving in this direction. With this arrangement, employee and employer contributions are invested, usually according to choices made by employees. Upon retirement, employees receive the cash that has accrued instead of a guaranteed set of benefits. In defined contribution plans, employers may still make generous contributions but employees bear the risk of how investments fare.

In recent years, only two states have exchanged the defined benefit approach for defined contribution: Alaska and Michigan. Michigan shifted its state public employees (though not teachers) to a defined contribution plan in 1997. At the time, this affected only new employees, but by 2009, about 50 percent of the Michigan state employee workforce was in defined contribution rather than defined benefit plans.¹⁷⁰ Alaska put all of its new employees in a defined contribution plan in 2005. With the recent losses in individual employee portfolios this continues to be a controversial and emotionally charged issue, and a number of bills were introduced in Alaska's legislature last year to repeal the decision. Pension officials say the move to defined contribution has had no apparent impact on Alaska's ability to retain or recruit employees, but solid data on the effect of the switch are still years away. "One of the challenges facing us in this conversation is bringing the data back to the table and showing what the facts are rather than the emotions," said Pat Shier, executive director of the Alaska Public Employees Retirement System.¹⁷¹

Increasing Employee Contributions

In many state systems, the employee contribution is fixed at a lower rate than the employer contribution. But in some states, contributions vary for employees as well as the employer. This is the case in Arizona, where the contribution rate for general (non-public safety) employees' pension plan is split equally between both employees and employers and can vary depending on the funding needs of the system. In the view of Paul Matson, executive director of the Arizona Retirement System, this method works well because employees have a direct interest in maintaining a well-funded pension plan. "It makes both the employer and employee very interested in the equity and cost of the program. If you do not split them equally and make them variable, it is more difficult to obtain mutual concern," Matson said. 172

Some states have the ability to raise employee pension contributions if needed. In the past several years, lowa and Minnesota have been raising employee contribution rates along with employer contribution rates, and in 2009, Nebraska increased its employee contribution rates for individuals in its defined benefit plans. In reaction to the state's fiscal difficulties, the New Mexico legislature passed a bill in 2009 that affects all employees who make annual salaries greater than \$20,000, shifting 1.5 percent of the employer contribution to employees for the next two years. A lawsuit on this action is pending.¹⁷³ New Hampshire and Texas increased payroll contributions required from new employees.

Several states also have asked employees to start making contributions for their retiree health care benefits. Kentucky, for instance, requires that new employees put in 1 percent of their pay. New Hampshire established a \$65 monthly charge for retired employees under 65 who are covered by retiree health insurance. And Connecticut now will require new employees, and current employees with less than five years service,¹⁷⁴ to put in 3 percent of their salaries.¹⁷⁵

Improving Governance and Investment Oversight

Over the long term, states also can help protect their public sector retirement benefit systems by ensuring strong oversight by their legislatures and consistent governance practices. Thoughtful polices help guide the selection and performance of pension fund boards and establish clear and distinct roles for trustees and staff.

Some states have rules in place to ensure that boards are not dominated by individuals who receive benefits. In Idaho, for example, three of the five positions cannot be members of the pension fund.¹⁷⁶ In Utah, the seven-member board is made up of the state treasurer, four financial professionals who are independent of the pension system and two individuals within the system—a public employee and an educator.¹⁷⁷ This stands in contrast to a state such as New Mexico, in which every member of the 12-member board is in a position that is eligible for a pension.¹⁷⁸

Oregon in 2003 made some dramatic changes to its pension board, reducing it from 12 to five members and requiring that three members be independent. The actuarial services manager in Oregon, Dale Orr, has been with the system since 1992, and said he sees a dramatic change in the behavior of the board since the reform went into effect. "The important thing is that the new board members have some experience in financial matters," said Orr. "They've taken a much more financial focus on the system, rather than a member-benefit focus, which the previous board tended to have. They're

engaging the actuary a lot more to do special studies and 'what if' scenarios to see what the cost of the current system is."179

In recent years, some states have been professionalizing oversight by shifting the complex task of pension investment from more general boards of trustees to specialized boards that focus on the topic. For example, Vermont in 2005 moved investment oversight from its pension boards to an entity called the Vermont Pension Investment Committee, which includes a representative elected by each of three boards, two gubernatorial appointees, and the state treasurer as an ex-officio member. 180 The change was designed to bring a higher level of expertise to the body responsible for investing the pension assets, to combine the assets of the three retirement systems to realize administrative savings, and to be able to act more quickly when making changes to the actual investment allocations.

In 2005, the South Carolina legislature created the South Carolina Retirement System Investment Commission and spelled out the level of education and experience needed by individuals to serve. A previous board had advisory responsibility but no authority or real oversight of the investments, which were entirely the province of the state treasurer and the board he or she sits on. Now there are four members on the investment commission besides the treasurer—"[I]ndividuals who have the skills and expertise to invest our funds," said Peggy Boykin, director of the South Carolina Retirement System. She said this was critical in moving forward with a diversified portfolio.¹⁸¹

In 2009, Illinois set up a number of protections to make sure that pension trustees, employees

and consultants are barred from benefiting from investment transactions. More competitive processes for procuring consulting and investment services were introduced, and the state's pension systems were required to review the performance of consultants and managers and establish ways of comparing costs.¹⁸²

In both New York and California, pension fund scandals involving placement agents intermediaries who connect investment managers with the states—provoked some action. New York Attorney General Andrew Cuomo has proposed a series of governance reforms, including strict limits on political contributions, extensive disclosures from investment fund personnel, the creation of a code of conduct, a requirement that any licensed professional report conflicts of interest, and a prohibition on investment firms from using placement agents or lobbyists to get business from the state pension fund. He also proposed changing supervision of the pension fund from a sole trustee to a 13-member board of trustees. Only New York, Connecticut and North Carolina have pension funds with a sole trustee. 183

California lawmakers, meanwhile, are considering similar legislation cracking down on placement agents. The legislation, drafted by two state officials who sit on CalPERS' board, would require agents to register as lobbyists. It also would prohibit investment firms from paying agents a commission or contingency.¹⁸⁴ In addition, in 2009, California passed a law that will improve and speed up financial reporting for its pension systems. The state also created the California Actuarial Advisory Panel to provide best practices and impartial input on retiree benefits to public agencies.¹⁸⁵

STATES TO WATCH: MODELS FOR SUCCESS

Pew has identified four states that demonstrate different successful approaches to designing and managing retirement systems: Florida, Nebraska, Iowa and Georgia.

FLORIDA: PROVIDING CONSISTENT FUNDING

As of fiscal year 2008, Florida's pension system had assets that were over 101 percent of its liabilities, resulting in a surplus of \$1.8 billion. The state consistently has funded its actuarially required contribution and follows conservative policies in managing its obligations.

Since 2000, Florida has managed to pay at least 90 percent of its actuarially required contribution each year. While the state failed to pay the entire contribution in four of the past 12 years, it overcontributed in other years, averaging 102 percent of what it was required to pay. Florida is not the only state that has created a well-funded pension system by consistently funding its actuarially required contributions. New York, for example, has a funding level of more than 107 percent, while Wisconsin is nearly 100 percent funded.

Florida's method for calculating annual contribution rates exemplifies the state's careful approach to funding its retirement promises. When states have an unfunded liability in their pension system, they are obligated to incorporate a portion of it into upcoming actuarially required contributions so that the bill is paid off over time. Similarly, when states have a surplus, some typically use it to reduce future annual contributions. However, Florida has legally mandated that pension surpluses of less than 5 percent of total liabilities will be reserved to pay for unexpected losses in the system—and even if the surplus is greater than 5 percent of total liabilities, only a fraction can be used to reduce the state's contributions. 186 This policy has helped Florida offer a traditionally structured defined benefits plan while maintaining funding at sustainable levels.

NEBRASKA: REDUCING RISK THROUGH A CASH BALANCE PLAN

In 2003, Nebraska instituted a relatively new concept for state pensions called a cash balance plan. It was mandated for new workers, but state and county employees hired prior to 2003 were given the option of joining that year and again in 2007. The cash balance plan was set up as an alternative to a defined contribution plan that the state put in place in the 1960s for state and county employees. Currently, 65 percent of the employees are covered through the cash balance plan while 35 percent remain in the defined contribution plan. Annually, workers contribute 4.8 percent of their salaries to the plan and employers put in a 6.8 percent salary match. This money is invested by the state for the benefit of retirees. (Nebraska educators, judges and state patrol employees participate in separate defined benefit plans.¹⁸⁷)

The Nebraska plan is similar to a defined contribution plan in that employees receive a payout upon retirement based on the actual amount of money in their account. The big difference is that Nebraska has dramatically cut the risk to employees by guaranteeing a 5 percent annual investment return.¹⁸⁸ It also provides dividends to employees when funding exceeds 100 percent and the investments do particularly well. That dividend amounted to a distribution of an additional \$41 million to workers' accounts in October 2006, \$13.5 million in 2007 and \$21 million in October 2008. (Those amounts were based on investment account balances at the end of the previous year, which meant that the most recent payout stemmed from information that preceded the stock market decline.) Cash balance plan members did not receive a dividend in 2009.

Unlike defined benefit plans, the cash balance plan uses no pension formula, so there is no calculation of final salary and, thus, no incentive for spiking. Employees can take the retirement sum in the form of a protected annuity with a 2.5 percent annual cost-of-living increase. Employees also have the option of receiving a rollover or lump sum distribution when they retire.

STATES TO WATCH: MODELS FOR SUCCESS

Nebraska's shift to the cash balance plan stemmed from research that it conducted on its defined contribution approach. In 2000, the state compared the retirement income of its state and county employees in the defined contribution plan with state teachers, who have a defined benefit plan. The results were bleak, showing that employees in the defined contribution plan tended to invest extremely conservatively, amassing dramatically fewer dollars by retirement than the state's investment team generated for the defined benefit teacher fund. The cash balance approach was established as a compromise, offering employees the higher returns and greater security of a defined benefit plan and the flexibility of a defined contribution plan, while protecting the state from the risks inherent with a defined benefit plan.

IOWA: BENEFIT CAPS AND ADJUSTABLE EMPLOYEE CONTRIBUTIONS

lowa has put a number of protections in place to keep its pension fund in good shape. That job has been somewhat easier because the state's constitution does not guarantee retirement benefits. lowa's practices are instead governed by statute, providing the state with more flexibility in making adjustments. 189

For example, several years ago, lowa's legislature reduced employees' ability to increase their pensions by artificially buoying income in the last several years on the job—the years on which pension benefit payouts are usually calculated. One change was to remove bonuses and car or housing allowances from the calculation of final salary; another was to put in place a cap on salary growth, so that a "final average salary," computed with the three highest years, cannot be greater than 121 percent of the fourth highest year. That change was put into effect in 2007 for all employees (not just new workers) and so far has resulted in 241 pensioners seeing reductions in the benefits they otherwise would have received. lowa's flexibility also allows it to adjust the contribution rates paid by employees—a factor that is set in stone in many other states. The rate was established at a combined 9.45 percent in 1979, with employers paying 60 percent and employees paying 40 percent. But in 2004, when the state's actuarially required contribution began to climb, officials started to increase the combined rate

by half a percent each year. In 2010, it had moved up to 10.95 percent. When employees share a significant part of pension costs, it reduces the incentive for them to continuously push for greater benefits.¹⁹⁰

With investment returns for the lowa Public Employee Retirement System down by 16.1 percent in fiscal year 2009, an advisory committee has been set up to figure out how to manage the funding drop. 191 "Everything is on the table," said Donna Mueller, the system's chief executive officer. Iowa may consider changes that could reduce benefits for non-vested employees—a gray area in the law. If undertaken, the move would be closely watched by other states. "We just have to keep the mission in mind," said Mueller, "to provide a secure retirement for public employees in a cost-effective way." 192

GEORGIA:

UNDERSTANDING THE IMPACT OF REFORM

For more than 20 years, Georgia has had laws in place that require any legislation affecting retiree benefits—whether a reduction or increase—to undergo an actuarial study to determine the long-term financial impact on the system. This practice has helped the state avoid the kinds of costly and irreversible benefit changes that have made pension systems more expensive in other states.

The initial legislation followed the development of a new Georgia constitution that called for "funding standards that would ensure the actuarial soundness of any pension or retirement system supported wholly, or partially, from public funds." Tommy Hills, the state's chief financial officer, said he believes that the law has helped the state greatly. "There's essentially a year lag on retirement bills," said Hills. "It provides a cooling off period."

This practice forces legislators to consider how any change could affect the state for the next 30 years, Hills said.¹⁹⁴ Recent legislation that has passed the Georgia Senate, though not the House, goes a step further, mandating that all changes be fully funded at inception.¹⁹⁵ Several other states have similar requirements for actuarial analysis in place. In North Carolina, every retirement-related bill must contain actuarial notes from both the General Assembly's actuary and the North Carolina Retirement System.¹⁹⁶ In 2006, Oklahoma passed its own Actuarial Analysis Act, modeled on Georgia's system.¹⁹⁷

Grading the States

To help policy makers and the public understand these challenges and their implications, Pew graded all 50 states on how well they are managing their public sector retirement benefit obligations, assessing how well they are handling their bills coming due both for pensions and retiree health care and other benefits.

Pensions

Pew assessed states' pension systems on three criteria and awarded each state up to four points: two points for having a funding ratio of at least 80 percent; one point for having an unfunded liability below covered payroll; and one point for paying on average at least 90 percent of the actuarially required contribution during the past five years. (See Appendix A for a more detailed description of the grading criteria.)

States earning four points were solid performers. Those earning two or three points were deemed in need of improvement. And those earning zero or one point were cause for serious concerns (see Exhibit 13).

Solid performers. Sixteen states received a perfect score of four out of four points and earned the label of solid performer. One example is Georgia—its state pension plans are well funded (at 92 percent) with an unfunded liability that is only 49 percent of covered payroll, and the state has consistently made its actuarially required contributions. All states that earned the grade of solid performer had adequately funded pension plans, had a manageable unfunded liability and were able to consistently pay their required contributions as of 2008. Of course, being a solid performer does not mean a state has solved all of its pension and other fiscal challenges.

In need of improvement. Fifteen states were deemed in need of improvement. California is an example. The state's pension funding levels are not dangerously low, its plans are more than 80 percent funded and the unfunded liability is less than covered payroll. However, California has failed to consistently pay the actuarially required contribution, spurring a funding decline from a \$9 billion pension surplus in 2000 to a \$53 billion unfunded liability in 2007, based on the most recently available data. Alabama is another example. The state consistently has made its required contributions in full and its unfunded liability is manageable. However, Alabama's pension plans are under the minimum 80 percent funding threshold that the Government Accountability Office says is preferred by experts.

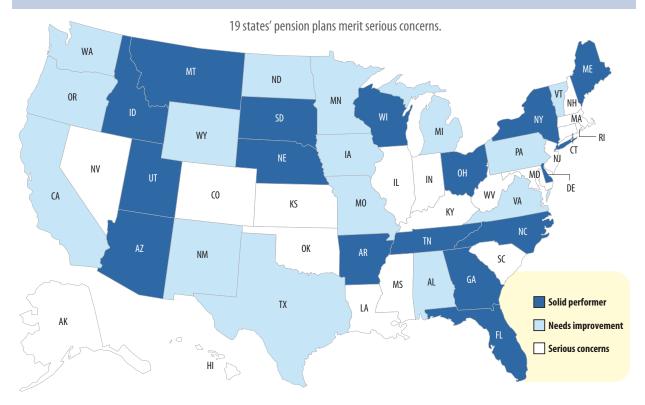
Meriting serious concerns. Nineteen states were rated as meriting serious concerns. Illinois—the worst-performing state—was one of eight to earn zero points toward its pension grade. (The other seven were Alaska, Colorado, Kansas, Kentucky, Maryland, New Jersey and Oklahoma.) The state's pension plans are underfunded (at 54 percent), have high unfunded liabilities (340 percent of covered payroll) and have insufficient contributions (less than 60 percent of the actuarially required contribution was paid in 2008). All in all, Pew's research found serious concerns with Illinois and 18 other states' lack of progress with taking the necessary steps to ensure their pension plans are financially secure.

Health care and Other Non-pension Benefits

Pew's criteria for grading states' retiree health care and other non-pension benefit obligations were much simpler and more lenient than those used

GRADING THE STATES

Exhibit 13 HOW WELL ARE STATES MANAGING THEIR PENSION OBLIGATIONS?



SOURCE: Pew Center on the States, 2010.

for the pension assessment. This is because most states have only recently begun to recognize these liabilities and many still have not put aside any assets to pay for these bills coming due. The Governmental Accounting Standards Board's (GASB) Statements 43 and 45, which were released in 2004 and first went into effect in 2006, marked the first time that states had to acknowledge and report their retiree health and other benefit obligations. States have started putting aside money for these benefits, but for most, the work has just begun. On average, states have only put aside 7.1 percent of the assets needed to adequately fund their retiree health care liabilities. Twenty states have not set aside any funds.

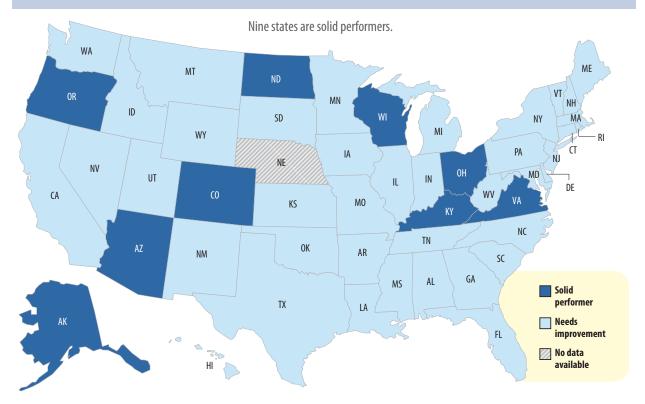
Because most states have only recently begun to account for and address these liabilities, Pew's grades measure the progress they are making

toward pre-funding. As a result, a grade indicating serious concerns was not included. Pew rated as solid performers those states that had set aside more than 7.1 percent, the state average, of funds to cover the bill coming due. All states that had set aside less than that amount were identified as needing improvement. This allowed Pew researchers to highlight and give credit to states that have begun to fund their retiree health care and other nonpension benefits while acknowledging that it is still too soon to expect states to have made meaningful progress. Pew made no distinction between states with implicit (e.g., health care subsidies) and explicit (e.g., health care plans) liabilities because GASB does not do so, requiring states to report on these obligations in exactly the same way.

Nine states earned the grade of solid performer. Forty states were in need of improvement—with

GRADING THE STATES

Exhibit 14 HOW WELL ARE STATES MANAGING THEIR NON-PENSION OBLIGATIONS?



SOURCE: Pew Center on the States, 2010

half of those failing to set aside any funds, as noted above. Nebraska had a long-term liability for retiree health care and other benefits, but this obligation is likely to be relatively small. The state does not provide not provide an actuarial valuation of its retiree health care liabilities and as a result Nebraska did not receive a grade regarding those obligations (see Exhibit 14).

Irrespective of the size of the liabilities—whether small or large, implicit or explicit—there was a great deal of variation among states and how they handled their bill coming due for retiree health care and other non-pension benefits. For example, New Jersey's liability of \$68.9 billion was the largest of any state and wholly unfunded. Virginia's bill coming due was nearly \$4 billion and almost 39 percent funded. Kansas' obligations totaled \$316 million, a fraction of

New Jersey's, but Kansas had not set aside any funding either.

Solid performers. Only two states—Arizona and Alaska—had set aside 50 percent or more of the assets needed to cover their future health care and other non-pension benefit obligations. Arizona was 65 percent funded, leading all states, and Alaska had nearly 56 percent in assets to cover its liabilities. Another seven states—Colorado, Kentucky, North Dakota, Ohio, Oregon, Virginia and Wisconsin—were also solid performers, ranging from 10.4 percent to 38.2 percent.

Needs improvement. Forty states were deemed in need of improvement, having set aside less than 7.1 percent of the funds needed to cover future health care and other non-pension benefit obligations. Twenty states had failed to put aside any assets.

Conclusion

With most 2010 legislative sessions under way, the encouraging news is that many state officials grasp the depth of the funding challenges for their public sector retirement benefit systems and the need to respond. But the pressure in an election year to channel money to competing priorities such as education may tempt lawmakers to neglect the problem. That will only widen the gap between what states have promised their employees and what they have set aside to pay the costs—and make the bill coming due even larger.

The states that are meeting their commitments have demonstrated that public sector retirement benefits can be adequately funded during good and bad times, with care taken to identify the long-term costs of short-term decisions. Due to mounting financial pressures, other states have been on an unsustainable course and will be forced to make tough choices. As lawmakers consider proposals to deal with the bill coming due, they have an opportunity to enact reforms that will have a lasting impact on their states' fiscal health.

Endnotes

- ³⁵ Analysis by Pew Center on the States, 2009.
- ³⁰ Based on the total number of households in the United States as of 2008, see American Community Survey, December 4, 2009, http://factfinder.census.gov.
- ³⁷ Keith Brainard, "Public Fund Survey Summary of Findings for FY2008," National Association of State Retirement Administrators, October 2009, p. 2.
- ³⁸ U.S. Government Accountability Office, *State and Local Government Retiree Benefits: Current Status of Benefit Structures, Protections and Fiscal Outlook for Funding Future Costs*, report to the Committee on Finance, U.S. Senate, September 2007.
- ³⁹ Falling below the 80 percent level has been cited by some experts, including the federal Government Accountability Office, as a sign that a pension system may be heading for trouble. This is only a benchmark, however. While pensions generally strive toward full funding, there is no particular magic about a 100 percent funded pension. It simply means that the government has the money on hand to pay for all benefits that have already been earned. When this is true, each subsequent annual contribution needs to cover only the additional benefits that employees earn in each year. When pension plans are not fully funded, governments also need to pay a portion of the unfunded liability each year—basically paying for benefits that were earned, but not paid for, in past years. The annual cost goes higher as the state drifts farther away from 100 percent funding.
- ⁴⁰ Pew Center on the States interview with Tom Spencer, executive director of the Oklahoma Public Employees Retirement System, June 23, 2009.
- ⁴¹ Pew Center on the States interview with Frank Karpinksi, executive director, Rhode Island Employees Retirement System, September 3, 2009.
- 42 "Nappier announces landmark bond sale," news release, Connecticut Office of the State Treasurer, April 22, 2008.
- ⁴³ Pew Center on the States interview with Mike Burnside, executive director, Kentucky Retirement Systems, July 28, 2009.
- ⁴⁴ Governmental Accounting Standards Board, "Summary of Statement No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans" (Issued 4/04), http://www. gasb.org/st/summary/gstsm43.html. "Summary of Statement No. 45 Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions" (Issued 6/04), http://www.gasb.org/st/summary/gstsm45.html.
- ⁴⁵ Center for State and Local Government Excellence, "The Crisis in State and Local Government Retiree Health Benefit Plans" November 2009, p. 8. http://www.slge.org/vertical/Sites/%7BA260E1DF-5AEE-459D-84C4-876EFE1E4032%7D/uploads/%7BDA8CD136a-5814-4AEA-AF21-067EF733C619%7D. PDF. Pew Center on the States interview with Tom Spencer,

- executive director of the Oklahoma Public Employees Retirement System, June 23, 2009. Pew Center on the States, *Promises with a Price: Public Sector Retirement Benefits*, December 2007, p47-48. Pew Center on the States interview with Bob Schultze, director of the Virginia Retirement System, June 21, 2009.
- ⁴⁶ Pew Center on the States Interview with Donna Mueller, chief executive officer, Iowa Public Employees Retirement System, August 4, 2009.
- ⁴⁷ "GASB 43 and 45 Supplemental Information," memorandum by Leslie Johnstone, executive officer, State of Nevada Public Employees Benefits Program, p. 11, January 24, 2007.
- ⁴⁸ Pew Center on the States, *Promises with a Price: Public Sector Retirement Benefits*, December 2007, p. 45
- ⁴⁹ Aon Consulting, "State of New Jersey Postemployment Benefits Other Than Pensions Actuarial Valuation, July 1, 2007," September 2008. www.state.nj.us/treasury/pensions/gasb-43-sept2008.pdf.
- ⁵⁰ Rhode Island Office of the Auditor General, "Status of Pension Plans Administered by Rhode Island Municipalities," audit summary, July 2007. www.oag.state.ri.us/reports/Local_ Pensions0707summ.pdf.
- ⁵¹ Pew Center on the States interview with Mike Burnside, executive director, Kentucky Retirement Systems, July 28, 2009.
- ⁵² Pew Center on the States interview with Tom Spencer, Oklahoma Public Employees Retirement System, June 23, 2009.
- ⁵³ Pew Center on the States interview with Timothy Blair, acting executive secretary of the State Retirement Systems of Illinois, October 11, 2009.
- ⁵⁴ The median time period that states use to "smooth" investment returns is five years.
- 55 Oregon Public Employees Retirement System, "Quarterly Investment Report," December 31, 2008.
- ⁵⁶ Oregon also has a "collar" on its rates. This means that rates cannot go up or down more than 3 percentage points between one biennium and the next if the pension funding level is between 80 percent and 120 percent. If funding falls below 80 percent (as pension actuaries expect in 2009), then the contribution cannot go up more than 6 percentage points. That is why the actual rise will be from 12 percent to 18 percent.
- ⁵⁷ Pew Center on the States interview with Paul Cleary, executive director, Oregon Employees Retirement System, June 29, 2009.
- 58 Ibid.
- ⁵⁹ Oregon Public Employees Retirement System, "Quarterly Investment Report," September 30, 2009.
- ⁶⁰ E-mail, interview with Barry Kozak, John Marshall Law School, November 11, 2009.

- ⁶¹ E-mail, interview with Carroll South, Montana Board of Investments, November 12, 2009.
- ⁶² National Conference of State Legislatures, State Budget Update: November, 2009, December, 2009.
- ⁶³ For 46 states, the 2010 fiscal year began on July 1, 2009. The exceptions are New York (April 1); Texas (September 1); and Alabama and Michigan (October 1). See "Budget Processes in the States," National Associations of State Budget Officers (NASBO), Summer 2008, accessed October 22, 2009, at http://www.nasbo.org/Publications/PDFs/2008%20Budget%20Processes%20in%20 the%20States.pdf.
- ⁶⁴ National Conference of State Legislatures, "FY 2010 Post-Enactment Budget Gaps and Budget Cuts," accessed December 2, 2009, at www.ncsl.org/default.aspx?tabid=18690.
- ⁶⁵ National Conference of State Legislators, "State Budget Update," July 2009, accessed at www.ncsl.org/documents/fiscal/ StateBudgetUpdateJulyFinal.pdf.
- ⁶⁶ Keith Brainard, "Public Fund Survey Summary of Findings for FY2008," National Association of State Retirement Administrators, October 2009, p. 2.
- ⁶⁷ Pew Center on the States interviews with Jill Bachus, director, Tennessee Consolidated Retirement System, September 3, 2009; Frederick Beaver, director, New Jersey Division of Pension and Benefits, October 27, 2009; Michael Williamson, director, North Carolina Retirement Systems, September 2, 2009; Tom Spencer, executive director, Oklahoma Public Employees Retirement System, June 23, 2009; Anne Werum Lambright, executive director, West Virginia Consolidated Public Retirement Board, September 10, 2009.
- ⁶⁸ California Public Employees' Retirement System, "Facts at a Glance: Investments," December 2009. www.calpers.ca.gov/eip-docs/ about/facts/investme.pdf.
- ⁶⁹ Teachers' Retirement System of Louisiana, 2009 Comprehensive Annual Financial Report, page 71. http://trsl.org/ezedit/ pdfs/09CAFR.pdf.
- ⁷⁰ California Public Employees' Retirement System, "Facts at a Glance: Investments," December 2009. www.calpers.ca.gov/eip-docs/about/facts/investme.pdf.
- ⁷¹ Pew Center on the States interview with Terry Slattery, executive director, New Mexico Public Employees Retirement Association, September 14, 2009.
- ⁷²Commonwealth of Pennsylvania, "Pension Bills Enacted Since 2001," Public Employees Retirement Commission. www.perc.state. pa.us/portal/server.pt/community/perc_home/2513/pension_bills_enacted_since_2001/525841.
- ⁷³ Pew Center on the States interview with Leonard Knepp, executive director, Pennsylvania State Employee Retirement System, June 24, 2009.
- Michael J. Masch, "Retiring Pennsylvania's Pension Challenge: Eliminating the 2012–13 Rate Spike," a pension reform white paper, June 8, 2008, p. 6.

- ⁷⁵ Pennsylvania State Employees Retirement System, "SERS Projected Funded Status and Employer Contributions," December 14, 2009.
- ⁷⁶ Total assets of retirement plan and their allocation are based on Federal Reserve Board's "Flow of Funds Accounts of the United States," Z1, June 7, 2007.
- Pew Center on the States interview with Terren Magid, executive director, Indiana Public Employees Retirement Fund, July 24, 2009.
- ⁷⁸ Pew Center on the States interview with Frank Karpinski, executive director, Employees Retirement System of Rhode Island, September 3, 2009.
- ⁷⁹ Pew Center on the States interview with Michael Travaglini, executive director, Massachusetts Pensions Reserve Investment Management Board, July 28, 2009.
- 80 Pew Center on the States interview with Mike Burnside, executive director, Kentucky Retirement Systems, July 28, 2009.
- ⁸¹ Pew Center on the States interview with Tom Spencer, executive director of the Oklahoma Public Employees Retirement System, June 23, 2009.
- 82 Pew Center on the States interview with Frederick J. Beaver, director, New Jersey Division of Pension and Benefits, October 27, 2009.
- 83 Governmental Accounting Standards Board, "Summary of Statement 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions," issued June 2004, http://gasb.org/st/index.html.
- ⁸⁴ National Conference on Public Employee Retirement Systems, "State Constitutional Protections for Public Sector Retirement Benefits," March 15, 2007. http://www.ncpers.org/Files/News/ 03152007RetireBenefitProtections.pdf.
- 85 National Conference on Public Employee Retirement Systems, "State Cases Addressing Public Sector Health Benefits, March 15, 2007. http://www.ncpers.org/Files/News/ 03152007HealthBenefitProtections.pdf.
- ⁸⁶ PCS interview with Tom Spencer, executive director of the Oklahoma Public Employees Retirement System, June 23, 2009.
- ⁸⁷ Pew Center on the States interview with Pat Robertson, executive director, Mississippi Public Employee Retirement System, August 7, 2009.
- 88 Pew Center on the States interview with Terry Slattery, executive director, New Mexico Public Employees Retirement Association, September 14, 2009.
- 89 Ibid.
- ⁹⁰ Pew Center on the States interview with Cynthia Webster, director, Vermont State Employees Retirement System, November 17, 2009.
- 91 Ibid.
- ⁹² Colorado is one of the states in which 2008 results reflect the full calendar year. The Colorado Public Employees Retirement Association experienced a 26 percent loss, according to Executive Director Meredith Williams.

- ⁹³ Pew Center on the States interview with Meredith Williams, executive director, Colorado Public Employees Retirement Association, July 29, 2009.
- ⁹⁴ In 2006, the Colorado General Assembly increased the retirement age back to 55 for new employees.
- 95 Colorado Public Employee Retirement Association, "Comprehensive Annual Financial Report," December 31, 2008.
- ⁹⁶ General employees contribute 8 percent of their salary to the pension fund each year, while state troopers contribute 10 percent—a total of \$557 million in 2008. State, school, judicial and local employers contributed another \$857 million in 2008, according to the Colorado PERA CAFR, December 31, 2008, p. 23.
- ⁹⁷ National Conference of State Legislatures, "State Pensions and Retirement Legislation 2009," accessed December 4, 2009, at www.ncsl.org/?tabid=17594.
- ⁹⁸ Pew Center on the States interview with Jeanne Kopek, assistant director, Comptroller Retirement Services Division, September 15, 2009.
- ⁹⁹ Pew Center on the States interview with Pamela Pharris, executive director of the Georgia Employees Retirement System, August 7, 2009.
- ¹⁰⁰ Two other states that fall into this category include New Hampshire and Minnesota. See "Impasse broken on public works retirement plan rescue," by Tom Fahey, *Union Leader*, May 8, 2007. See also "Public Pensions in Minnesota: Re-Definable Benefits and Under-Reported Performance," Center for Public Finance Research, May 2006, p. iv.
- ¹⁰¹ Pew Center on the States interview with Paul Cleary, executive director, Oregon Employees Retirement System, June 29, 2009, and December 18, 2009.)
- 102 Pew Center on the States interview with Paul Cleary, executive director, Oregon Employees Retirement System, June 29, 2009.
- 103 Appeals continue on certain legal points, but Oregon prevailed on a number of key aspects of the reforms.
- 104 During Pew Center on the States interviews with representatives of pension systems in all 50 states, many predicted that this would become a significant legislative issue in coming years.
- ¹⁰⁵ State of Utah, "A Performance Audit of the Cost of Benefits for Reemployed Retirees and Part-Time Employees," Office of the Legislative Auditor, November 2009, p.ii.
- ¹⁰⁶ State of Utah, "A Performance Audit of the Cost of Benefits for Reemployed Retirees and Part-Time Employees," Office of the Legislative Auditor, November 2009, p. i.
- ¹⁰⁷ Pew Center on the States interview with Paul Matson, executive director, Arizona Retirement System, June 25, 2009.
- ¹⁰⁸ Pew Center on the States interview with David Craik, executive director, Delaware Public Employees Retirement System, September 23, 2009.

- 109 Pew Center on the States interview with Pamela Pharris, executive director, Georgia Employees Retirement System, December 15, 2009.
- 110 Pew Center on the States, Beyond California: States in Fiscal Peril, November 2009, page 2. http://downloads. pewcenteronthestates.org/BeyondCalifornia.pdf
- ¹¹¹ Lucy Dadayan and Donald J. Boyd, "State Tax Revenues Show Record Drop for Second Consecutive Quarter," The Nelson A. Rockefeller Institute of Government, October 2009, No. 77, p. 1.
- 112 National Governors Association and National Association of State Budget Officers, "The Fiscal Survey of States," December 2009.
- ¹¹³The Texas Municipal Retirement System may be the only large public sector pension system that was relatively unaffected by investment losses because of its very high bond allocation, according to Keith Brainard, research director at the National Association of State Retirement Administrators.
- 114 Experts from the National Association of State Retirement Administrators, Moody's, and S&P, among others, have weighed in on this issue. See Keith Brainard, "Public Fund Survey Summary of Findings for FY2008," National Association of State Retirement Administrators, October 2009, p. 5. www.publicfundsurvey. org/publicfundsurvey/index.htm. Moody's U.S. Public Finance, "Employee Pension Costs Pressure State and Local Governments," November, 2009. www.nasra.org/resources/Moodys0911.pdf. Standard & Poor's, "No Immediate Pension Hardship For State and Local Governments, But Plenty of Long Term Worries," June 8, 2009. http://www.nasra.org/resources/sandp0906.pdf.
- 115 Bureau of Labor Statistics, "National Compensation Survey," March 2009
- ¹¹⁶Pew Center on the States, *Promises with a Price: Public Sector Retirement Benefits*, December 2007, p. 11.
- ¹¹⁷Bob Cuddy, AnnMarie Cornejo and Larissa Puro, "California's budget crisis: Locals make \$100,000 pension list," The San Luis Obispo Tribune, July19, 2009.
- ¹¹⁸ Ibid.
- 119 Civic Committee of the Commercial Club of Chicago, "Civic Committee Reform Proposal," summary, August 19, 2009, p. 1.
- ¹²⁰ Ibid, p. 11.
- ¹²¹ Field Research Corporation, "Voters Favor Limiting the Pension Benefits of Newly Hired Government Workers," *The Field Poll*, October 16, 2009, p. 3. http://field.com/fieldpollonline/subscribers/Rls2318.pdf.
- 122 Paul Simon Public Policy Institute, "Illinois Voters Want Budget Cuts but Can't Say Where," Southern Illinois University Carbondale, October 1, 2009, p. 4. http://paulsimoninstitute.org/ images/PDF/budget_poll_data.pdf.
- ¹²³ Based on a search of the Dow Jones Factiva tool for newspaper articles that included the string "state pension" twice. Factiva was accessed on December 2, 2009.

- 124 Craig Karmin, "Pay-to-Play Probe Turns to Venture Capitalist," Wall Street Journal, December 3, 2009.
- 125 Hillary Chabot. "Charles Baker Cooks up Plan to Cut Pension Abuse," Boston Herald, November 20, 2009.
- ¹²⁶ Craig Karmin, "Pension Calculus Draws New Scrutiny," Wall Street Journal, July20, 2009.
- ¹²⁷ Pew Center on the States, *Promises with a Price: Public Sector Retirement Benefits*, December 2007, p. 11
- ¹²⁸ National Center for Health Statistics, "Health United States 2008," Table 26, March 2009, p. 203.
- 129 Pew Center on the States interview with David Shimabukuro, administrator, Hawaii Employees Retirement System, September 23, 2009, and January 4, 2010.
- ¹³⁰ U.S. Bureau of Labor Statistics, news release, "Union Members in 2008," January 28, 2009. http://www.bls.gov/news.release/pdf/ union2.pdf.
- 131 Ron Snell, "Pension Tension," State Legislatures, National Conference of State Legislatures, May, 2008.
- ¹³² Pew Center on the States interview with Meredith Williams, executive director, Colorado Public Employees Retirement Association, July 29, 2009.
- ¹³³ Pew Center on the States interview with Arcy Baca, president of the American Federation of State, County and Municipal Employees (AFSCME) Local 477 (Santa Fe, New Mexico), October 2009.
- ¹³⁴ Steve Peoples, "R.I. Public Employee Unions Align to Sue Over Pension Changes," *The Providence Journal*, July 30, 2009. Retirement date provided through Pew Center on the States interview with Frank Karpinski, September 3, 2009.
- ¹³⁵ Pew Center on the States interview with Gary Chaison, professor of industrial relations, Clark University, November 4, 2009.
- ¹³⁶Pew Center on the States interview with Kara Kelly, executive director, Las Vegas Chamber of Commerce, October 2009.
- ¹³⁷ Geoff Dornan, "State Confronts \$3 Billion Shortfall," Nevada Appeal, September 16, 2009.
- ¹³⁸ Michael Mishak and Megan McCloskey, "Revisiting Public Workers' Pay," Las Vegas Sun, November 22, 2008.
- 139 Pew Center on the States interview with Kara Kelly, executive director, Las Vegas Chamber of Commerce, October 2009.
- ¹⁴⁰ Las Vegas Chamber of Commerce, "An Overview and Comparative Analysis of the Nevada Public Employees' Retirement System," Fiscal Analysis Brief (1)3, September 2008.
- Pew Center on the States interview with Kara Kelly, October, 2009; Steven Horsford, Nevada Senate majority leader, September 18, 2009.
- 142 Pew Center on the States interview with Dana Bilyeu, executive officer, The Public Employees Retirement System of Nevada, September 9, 2009.

- ¹⁴³Cathy Bussewitz, "Public employee reform bill advances," Associated Press, May 29, 2009.
- ¹⁴⁴ Pew Center on the States interview with Steven Horsford, majority leader, Nevada Senate, September 18, 2009.
- 145 Pew Center on the States interview with Gerri Madrid Davis, director of the National Public Pension Coalition, November 13, 2009.
- ¹⁴⁶ National Conference of State Legislatures, *State Pensions and Retirement Legislation 2009*, accessed December 4, 2009, at www. ncsl.org/?tabid=17594.
- 147 "Final Report of the Special Commission to Study the Massachusetts Contributory Retirement Systems," accessed January 4, 2010, at http://www.mass.gov/mtrs/commission.pdf.
- 148 "Blue Ribbon Commission to Study Retiree Health Care Funding Options," Maryland Manual On-Line, July 2006. http://www.msa. md.gov/msa/mdmanual/26excom/html/31retiree.html. Email from Michael Rubenstein, principal policy analyst and staff, Blue Ribbon Commission to Study Retiree Health Care Funding Options, January 5, 2010.
- According to interviews with pension officials: the board for Colorado's Public Employees Retirement Association embarked on an "eight-stop listening tour" around the state to gather input from plan participants and the public on pension reform; an advisory committee was set up to work with the lowa Public Employees Retirement System to study potential actions that can help the state deal with large investment losses, including possible benefit changes; Minnesota's State Employee Retirement System Board has been looking at questions of sustainability; the Ohio Public Employees Retirement System has embarked on a strategic planning process to re-examine its benefits structure; Utah has engaged in an ad hoc exploration, with the legislature holding hearings to invite employees and employers to provide impact on the topic of pension reform.
- 150 Pew Center on the States interview with Paul Matson, executive director, Arizona Retirement System, June 25, 2009.
- 151 Pew Center on the States interview with Jill Bachus, director, Tennessee Consolidated Retirement System, September 3, 2009.
- 152 Pew Center on the States interview with Pat Shier, Alaska Public Employees Retirement System, September 11, 2009.
- 153 "Treasurer Nappier announces unprecedented bond sale," news release, Connecticut Office of the State Treasurer, April 8, 2008.
- ¹⁵⁴ National Conference of State Legislatures, *State Pensions and Retirement Legislation 2009*, accessed December 4, 2009, at www.ncsl.org/?tabid=17594; *Pensions and Retirement Plan Enactments in 2008 State Legislatures*, accessed December 4, 2009, at http://www.ncsl.org/default.aspx?tabid=13313.
- 155 Government Finance Officers Association, "Evaluating the Use of Pension Obligation Bonds (2005)" Recommended Practice. http:// www.gfoa.org/downloads/debtevalusepensionobligbonds.pdf.
- ¹⁵⁶ Girard Miller, "Bonding for Benefits: POBs and 'OPEB-OBs," Governing, January 15, 2009. www.governing.com/column/ bonding-benefits-pobs-and-%E2%80%98opeb-obs%E2%80%99.

- ¹⁵⁷ Based on a Pew Center on the States analysis using information on the 2003 Illinois bonds available through the Illinois State Comptroller, available at http://www.comptroller.state.il.us/ FiscalFocus/article.cfm?ID=286, and based on investment returns for Illinois available at the Illinois State Board of Investments, available at http://www.isbi.illinois.gov/pdf/ISBI_ Annual_Report_2008.pdf and http://www.isbi.illinois.gov/pdf/ ExecutiveSummary.pdf.
- 158 Pew Center on the States interview with Leonard Knepp, executive director, Pennsylvania State Employee Retirement System, June 24, 2009.
- 159 Pew Center on the States interview with Chris DeRose, executive director, Ohio Public Employees Retirement System, September 17, 2009.
- ¹⁶⁰ E-mail from David Bergstrom, executive director, Minnesota State Retirement System, September 22, 2009.
- ¹⁶¹The state did not change the 65/5 provision, allowing employees to retire at age 65 with at least 5 years of service. Police and firefighters eligibility remains at 65/5, 55/10, 50/20, but a 25-and-out option was removed.
- 162 Pew Center on the States interview with Ted Cheatham, director of the West Virginia Public Employees Insurance Agency, December 15, 2009.
- ¹⁶³ Pew Center on the States interviews with Michael Williamson, director, North Carolina Retirement System, September 2, 2009; Tommy Hills, chief financial officer, Georgia, November 18, 2009; Jill Bachus, director, Tennessee Consolidated Retirement System, September 3, 2009.
- 164 Tennessee Senate Fiscal Note, SB1826. http://www.capitol.tn.gov/ Bills/106/Fiscal/SB1826.pdf, accessed February 20, 2009.
- 165 Pew Center on the States interviews with Anne Werum Lambright, executive director, West Virginia Consolidated Public Retirement Board, September 10, 2009; and Rob Wylie, executive director, South Dakota Retirement System, September 8, 2009.
- 166 Wisconsin's system contrasts with other states that ran into trouble from sharing gains from good years with employees. The difference is that Wisconsin shares losses as well as gains. When Minnesota and Oregon shared "excess returns" with retirees, they ran into trouble because the states took on all the risk in years when returns were low or negative.
- 167 Pew Center on the States interview with Dave Stella, secretary, Wisconsin Retirement System, September 1, 2009.
- 168 E-mail from Pamela Pharris, executive director, Georgia Employees Retirement System, December 15, 2009.
- 169 Pew Center on the States interview with Paul Cleary, executive director, Oregon Employees Retirement System, June 29, 2009.
- ¹⁷⁰ Pew Center on the States interview with Phillip Stoddard, director, Michigan State Employees Retirement System, June 21, 2009.
- ¹⁷¹ Pew Center on the States interview with Pat Shier, Alaska Public Employees Retirement System, September 11, 2009.

- ¹⁷² Pew Center on the States interview with Paul Matson, executive director, Arizona Retirement System, June 25, 2009.
- ¹⁷³ Pew Center on the States interview with Terry Slattery, executive director, New Mexico Public Employees Retirement Association, December 14, 2009.
- ¹⁷⁴For employees with fewer than five years service as of July 1, 2009, the 3 percent contribution will begin July 1, 2010.
- ¹⁷⁵ E-mail from William Morico, Retirement and Benefit Services Coordinator, Healthcare Policy and Benefit Services Division, State of Connecticut, November 18, 2009.
- ¹⁷⁶ Pew Center on the States interview with Don Drum, executive director, Idaho Public Employees Retirement System, September 26, 2009.
- ¹⁷⁷ Pew Center on the States interview with Robert Newman, executive director, Utah Retirement Systems, October 5, 2009.
- ¹⁷⁸The 12 members include two ex officio members—the State Treasurer and the Secretary of State. The other 10 are elected by the Public Employees Retirement Association membership and include four state members, four municipal members and two retirees. Pew Center on the States interview with Terry Slattery, executive director of the New Mexico Public Employees Retirement Association, September 14, 2009.
- 179 Pew Center on the States interview with Dale Orr, actuarial services manager, Oregon Public Employees Retirement System, June 29, 2009.
- 180 Pew Center on the States interview with Cynthia Webster, Vermont State Employees Retirement System, November 2, 2009.
- 181 Pew Center on the States interview with Peggy Boykin, director, South Carolina Retirement Systems, July 2, 2009.
- ¹⁸² National Conference of State Legislatures, State Pensions and Retirement Legislation 2009, accessed December 4, 2009, at www.ncsl.org/?tabid=17594.
- ¹⁸³ News release, New York Attorney General Andrew Cuomo, October 8, 2009. http://www.ag.ny.gov/media_center/2009/oct/ oct8a_09.html.
- ¹⁸⁴ News release, California Public Employees Retirement System, November 23, 2009. http://www.calpers.ca.gov/index.jsp?bc=/ about/press/pr-2009/nov/placement-agents-lobbyists.xml.
- ¹⁸⁵ California Senate Bill 1123, August 29, 2008. http://info.sen.ca.gov/pub/07-08/bill/sen/sb_1101-1150/sb_1123_bill_20080831_enrolled.pdf.
- ¹⁸⁶ Florida Legislature, "Florida Retirement System Pension Plan Fully Funded and Valuation Met Standards," Office of Program Policy Analysis and Government Accountability, February 2004, p. 22. http://www.oppaga.state.fl.us/MonitorDocs/Reports/pdf/0413rpt. pdf.
- 187 Pew Center on the States interview with Phyllis Chambers, executive director, Nebraska Retirement System, October 6, 2009.

- 188 Participants are guaranteed a 5 percent return, but they also can receive a higher return if the Federal Mid-term rate (as published by the Internal Revenue Service) plus 1.5 percent is greater than 5 percent.
- 189 Pew Center on the States interview with Donna Mueller, chief executive officer, Iowa Public Employees Retirement System, August 4, 2009.
- ¹⁹⁰ Ibid.
- ¹⁹¹ Iowa Public Employees' Retirement System Comprehensive Annual Financial Report, FY2009, p. 4 http://www.ipers.org/publications/ misc/pdf/financial/cafr/cafr.pdf.
- ¹⁹² Pew Center on the States interview with Donna Mueller, chief executive officer, Iowa Public Employees Retirement System, August 4, 2009.

- ¹⁹³ Georgia Constitution, Section X, Retirement Systems, Paragraph V, http://www.sos.ga.gov/elections/constitution_2007.pdf.
- ¹⁹⁴ Pew Center on the States interview with Tommy Hills, chief financial officer, Georgia, November 18, 2009.
- ¹⁹⁵ Pew Center on the States interview with Pamela Pharris, director, Georgia Employees Retirement System, December 14, 2009.
- ¹⁹⁶ Pew Center on the States interview with Michael Williamson, director, North Carolina Retirement System, September 2, 2009.
- ¹⁹⁷ Ronald K. Snell, "Pension and Retirement Plan Enactments in 2006 State Legislatures," National Conference of State Legislatures, October 2006.

Methodology

Data Sources

The main data source used for this project was the Comprehensive Annual Financial Report (CAFR) produced by each state for fiscal year 2008. The CAFR is an annually released publication that details the financial situation and key data for the state. The Governmental Accounting Standards Board (GASB) stipulates that the CAFR should include certain disclosures regarding pension and retiree health finances. Because CAFRs contain standard information in a consistent format, they are a valuable source for data on state-run retirement systems.

In addition to the state CAFR, many pension plans also release their CAFRs. In most cases, Pew staff found the plan CAFRs to offer more detailed and useful data than the state CAFRs and tried to use the plan documents when available. Another key information source was actuarial valuations. These are documents outlining the calculations made to assess the current and future costs of pension plans and retiree health plans. Finally, in some instances data were not available and we contacted state pension officials directly.

Scope of Data Collection

Plans included in the data collection were limited to the pension plans and retiree health and other benefit plans listed in the state CAFR. In some cases, a state will include a plan in its CAFR while indicating that it has no financial interest in that plan; such plans were excluded from this study.

Many states allow local governments to participate in the same plans set up for their own government agencies. As a result, this study includes plans for municipal workers or teachers when those plans are run by the state and the state maintains a financial interest. Locally run pension plans were excluded. While this means that the data for some states includes local workers while the data for others states do not, this does not affect the analysis in this report. Pew's assessment is based on indicators that scale with the size of the system; if a state's retirement system is only 50 percent funded, it is graded as meriting serious concerns regardless of whether municipal workers are included.

Another limit of the data collection is that it includes only defined benefit plans and cash balance plans. A defined benefit plan promises its recipients a set level of benefits, generally for life. In the case of pension benefits, it is based on a "defining" formula that usually includes the number of years served and an employee's salary multiplied by a preset figure (e.g., 30 years x \$30,000 x 1.75). In the case of retiree health care, the promised benefit is typically the payment of a portion of the (or the entire) medical insurance premium. However, it can also be based on a defined formula much like a pension. In this case, a certain monthly income is promised that must be used for health expenses. A cash balance plan requires the employer and employees to make annual contributions, and, as with a defined benefit plan, they are assured a preset payment. Employees are guaranteed a 5 percent yearly rate of return, although successful investments may push the rate even higher.

Pew's data collection focused on the schedule of funding progress and the schedule of employer contributions. The schedule of funding progress indicates how well funded a pension or retiree health plan is and includes the actuarial value

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of assets, the actuarial value of liabilities, the unfunded liability and the percentage of the liability that has been funded. The schedule of employer contributions shows the actuarially required contribution—the amount of money that the employers sponsoring the plan need to contribute annually to pay for future benefits as they are earned by employees, and to pay for previously earned benefits that remain unfunded. The schedule of funding progress also includes the actual annual contributions that the employers made and the percentage of the actuarially required contribution that was actually made. Together these data give a basic impression of the financial status of a retirement plan.

In the case of pension plans, Pew researchers also collected other key data points: membership numbers, covered payroll and actuarial assumptions.

- Membership numbers show the size of a plan and its composition—the number of currently active members who are accruing benefits and paying into the plan and currently retired members who are drawing benefits from the plan.
- Covered payroll helps show the scale of a pension plan. Large plans can afford greater liabilities and, in fact, comparing the covered payroll to the unfunded liability is a highly effective way of determining whether the unfunded liabilities of a plan are reaching dangerously high levels.
- Actuarial assumptions are the building blocks for estimating future liabilities. Pew staff collected each pension plan's actuarial cost method, estimated rate of return and use of smoothing methods. Each of these assumptions, along with others that Pew did not collect from the CAFRs, is used by

the actuaries to estimate how much money would be needed to pay for future liabilities. Among the most important is the assumed rate of return, which is the annual expected gain on investments. When actual experience differs from actuarial assumptions, plans can find themselves facing unexpectedly high or low liabilities. For example, a state could have higher than expected pension liabilities because employee life spans turned out to be greater than anticipated or investment returns came in lower than predicted.

Pew was able to obtain fiscal year 2008 data for all major state pension plans for all states except for Ohio. For that state, we used fiscal year 2007 data. The data collection stretches back to 1997 for most states, allowing Pew to look at changes over time. In the case of retiree health plans, data have only recently become available because of a 2004 ruling by the Governmental Accounting Standards Board (Statements Nos. 43 and 45) that mandated that states collect and present data on their actuarial liabilities for retiree health and other benefits. Because of this, past data for most states are unavailable. Many states also lack the infrastructure to regularly release data on retiree health and other benefits, so only data from 2007 or 2006 are available for many staterun retiree health plans. Because of the dearth of data, Pew also was unable to consistently collect supplementary information for most retiree health plans such as membership numbers or covered payroll.

Accuracy and Comprehensiveness

To ensure the accuracy of the data presented in this report, Pew staff implemented numerous quality control measures. First, Pew identified

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and double-checked all instances where data changed dramatically over time as a means of identifying potential errors in transcribing or interpreting data. Second, all data were compared when possible with pension data included in the Public Fund Survey, a survey of public pension plans run by the National Association of State Retirement Administrators, or with retiree health data included in the Center for State and Local Government Excellence report, At a Crossroads. Pew staff checked for discrepancies and made adjustments as necessary. Finally, retirement and finance officials in each state were given the opportunity to review Pew's data for accuracy and in many cases offered useful feedback.

Data Analysis

Pew's analysis focused on the funding level of retirement plans. The percent of a plan that is funded is the single best indicator of a retirement plan's fiscal health. States should try to ensure that the retirement plans that they run are 100 percent funded—that enough assets have been put into the plan to match the actuarially accrued liability. While Pew collected data on 231 pension plans and 159 retiree health and other benefit plans, each state's plans were aggregated to provide one set of pension numbers and one set of retiree health plan numbers for each state. Thus Oregon, which runs one pension plan for state and local employees, can be easily compared with Washington, which runs 12 different pension plans.

States have a lot of leeway in how they compute their obligations and present their data, so three main challenges arise in comparing their numbers. First, states vary in their smoothing practices—that is, how and when they recognize investment gains and losses.

While most states acknowledge them over a number of years, several show their full impact immediately. Second, most states conduct actuarial valuations on June 30, but 15 perform them at other times, such as December 31. The severe investment losses in the second half of 2008 mean that states that do not smooth and that conduct their asset valuations in December will show pension funding levels that will appear worse off than states that did so on June 30. However, this also means that such states' numbers are likely to show a faster recovery than other states. (In addition, when investments were doing extremely well, their data reflected the full gains immediately, while other states smoothed those gains over time.) Finally, other factors also can impact states' asset and liability estimates, such as assumptions of investment returns, retirement ages and life spans. Conceivably, Pew could have recalculated all states' information using a standard set of assumptions—but we concluded that using states' own data and assumptions was the most objective, transparent and defensible approach to this analysis. In any instance in which a state's assumptions or practices vary in a meaningful way from others and significantly affect our findings, we attempt to explain these circumstances in the report, the state's fact sheet or both.

To measure how well states are managing their public sector retirement benefit obligations, Pew assigned each state two grades. One grade assessed the state's pension plans and the other rated its retiree health and other benefit plans. For the pension grade, a state could either be a solid performer, in need of improvement or meriting serious concerns. The retiree health care grade only included the "solid performer" and "needs improvement" categories. Because states have

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historically treated pension plans very differently than retiree health benefits, the two grades are based on different criteria.

Pensions grade. The pension grade was based on up to four possible points. States with four points were labeled solid performers, those with two or three points were deemed as needing improvement, and those with only one or zero points were classified as meriting serious concerns. The points were distributed as follows:

- Two points for having a funding ratio of at least 80 percent. The percentage funded is the best indicator of whether a pension plan is in healthy shape and thus is given more weight than the other criteria. The benchmark of 80 percent has been identified by the Government Accountability Office and other experts as the threshold for adequate pension funding.
- One point for having an unfunded liability totaling less than covered payroll. The payroll of all employees in a state's pension plan is a good proxy for the state's overall spending capacity, and an unfunded liability that is too high relative to an employer's ability to pay indicates a plan in fiscal trouble. Additionally, pension plans with very high unfunded liabilities relative to covered payrolls tend not only to be poorly funded but also generous relative to the state's willingness and capacity to pay.
- One point for paying on average at least 90
 percent of the actuarially required contribution
 during the past five years. States that have
 paid the actuarially required contribution for a
 sustained period are on the right track toward
 being adequately funded.

Health care and other non-pension benefits grade. Pew's criteria for grading states' retiree health care and other non-pension benefit

obligations were much simpler and more lenient than those used for the pension assessment. This is because most states have only recently begun to recognize these liabilities and many still have not put aside any assets to pay for these bills coming due. On average, states have only put aside 7.1 percent of the assets needed to adequately fund their retiree health liabilities.

Because most states have only recently begun to account for and address these liabilities, Pew's grades measure the progress they are making toward pre-funding. As a result, a "serious concerns" grade was not included. Pew rated as solid performers those states that had set aside more than 7.1 percent of funds to cover the bill coming due. All states that had set aside less than that amount were identified as needing improvement. This allowed Pew researchers to highlight and give credit to states that have begun to fund their retiree health care and other benefits while acknowledging that it is still too soon to expect states to have made meaningful progress.

An additional concern in grading state retiree health care and other benefit liabilities was the variation in the generosity of benefits offered. States vary much more in the level of non-pension benefits they provide than they vary with pension benefits. Moreover, for states with minimal (or implicit) benefits, it may be less of a financial necessity to pre-fund, and such states potentially could sustain a pay-as-you-go approach. However, it is still good financial practice to pre-fund, future liabilities. Additionally, in requiring that states assess their obligations for retiree health care benefits, GASB made no distinction in the size of retiree health benefits. We decided to follow that approach in deciding which benefits to include in our analysis.

APPENDIX B

Exhibit B1. Bridging the Gap—State Pension Grades

State	Grade	Points	Percentage of accrued liabilities funded	Unfunded liability as percentage of covered payroll	Percentage of actuarially required contribution made, 5-year average
Alabama	Needs improvement	0	77%	93% 158%	100% 76%
Alaska	Serious concerns	-	76%		
Arizona	Solid performer	4	80%	67%	101%
Arkansas	Solid performer	4	87%	72%	104%
California	Needs improvement	3	87%	83%	86%
Colorado	Serious concerns	0	70%	243%	58%
Connecticut	Serious concerns	1	62%	449%	127%
Delaware	Solid performer	4	98%	7%	94%
Florida	Solid performer	4	101%	-7%	100%
Georgia	Solid performer	4	92%	49%	100%
Hawaii	Serious concerns	1	69%	137%	100%
Idaho	Solid performer	4	93%	30%	106%
Illinois	Serious concerns	0	54%	341%	60%
Indiana	Serious concerns	1	72%	101%	97%
lowa	Needs improvement	3	89%	43%	85%
Kansas	Serious concerns	0	59%	133%	66%
Kentucky	Serious concerns	0	64%	234%	83%
Louisiana	Serious concerns	1	70%	181%	102%
Maine	Solid performer	4	80%	14%	105%
Maryland	Serious concerns	0	78%	102%	85%
Massachusetts	Serious concerns	1	63%	207%	93%
Michigan	Needs improvement	3	84%	97%	85%
Minnesota	Needs improvement	3	81%	91%	84%
Mississippi	Serious concerns	1	73%	143%	98%
Missouri	Needs improvement	2	83%	102%	83%
Montana	Solid performer	4	84%	86%	113%
Nebraska	Solid performer	4	92%	37%	98%
Nevada	Serious concerns	1	76%	140%	97%
New Hampshire	Serious concerns	1	68%	109%	95%
New Jersey	Serious concerns	0	73%	137%	33%
New Mexico	Needs improvement	2	83%	101%	89%
New York	Solid performer	4	107%	-41%	100%
North Carolina	Solid performer	4	99%	2%	100%
North Dakota	Needs improvement	3	87%	51%	70%
Ohio	Solid performer	4	87%	85%	96%
Oklahoma	· ·	0	61%		
	Serious concerns	2		220%	70%
Oregon	Needs improvement		80%	132%	86%
Pennsylvania	Needs improvement	3	87%	78%	52%
Rhode Island	Serious concerns	1	61%	277%	100%
South Carolina	Serious concerns	1	70%	139%	100%
South Dakota	Solid performer	4	97%	13%	100%
Tennessee	Solid performer	4	95%	20%	100%
Texas	Needs improvement	3	91%	35%	87%
Utah	Solid performer	4	84%	80%	100%
Vermont	Needs improvement	3	88%	41%	81%
Virginia	Needs improvement	3	84%	71%	87%
Washington	Needs improvement	3	100%	-1%*	37%
West Virginia	Serious concerns	1	64%	188%	164%
Wisconsin	Solid performer	4	100%	2%*	100%
Wyoming	Needs improvement	2	79%	82%	101%

"While Washington and Wisconsin are approximately 100 percent funded, Washington has a slight surplus and Wisconsin has a slight unfunded liability.

NOTE: When states run a pension surplus, they have a negative unfunded liability and thus the unfunded liability as a percentage of covered payroll is negative.

SOURCE: Pew Center on the States, 2010.

APPENDIX B

Exhibit B2. Bridging the Gap—State Retiree Health Care and Other Non-pension Benefit Grades

State	Grade	Points	Percentage funded	
Alabama	Needs improvement	0	2.5%	
Alaska	Solid performer	1	55.9%	
Arizona	Solid performer	1	65.2%	
Arkansas	Needs improvement	0	0.0%	
California	Needs improvement	0	0.0%	
Colorado	Solid performer	1	18.7%	
Connecticut	Needs improvement	0	0.0%	
Delaware	Needs improvement	0	1.4%	
Florida	Needs improvement	0	0.0%	
Georgia	Needs improvement	0	4.1%	
Hawaii	Needs improvement	0	0.0%	
Idaho	Needs improvement	0	0.9%	
Illinois	Needs improvement	0	0.2%	
Indiana	Needs improvement	0	0.0%	
lowa	Needs improvement	0	0.0%	
Kansas	Needs improvement	0	0.0%	
Kentucky	Solid performer	1	10.4%	
Louisiana	Needs improvement	0	0.0%	
Maine	Needs improvement	0	1.2%	
Maryland	Needs improvement	0	0.8%	
Massachusetts	Needs improvement	0	1.8%	
Michigan	Needs improvement	0	1.9%	
Minnesota	Needs improvement	0	0.0%	
Mississippi	Needs improvement	0	0.0%	
Missouri	Needs improvement	0	0.5%	

State	Grade	Points	Percentage funded	
Montana	Needs improvement	0	0.0%	
Nebraska does no	t measure its retiree healt	h or other benefits		
Nevada	Needs improvement	0	0.0%	
New Hampshire	Needs improvement	0	5.4%	
New Jersey	Needs improvement	0	0.0%	
New Mexico	Needs improvement	0	5.5%	
New York	Needs improvement	0	0.0%	
North Carolina	Needs improvement	0	2.1%	
North Dakota	Solid performer	1	34.3%	
Ohio	Solid performer	1	38.2%	
Oklahoma	Needs improvement	0	0.0%	
Oregon	Solid performer	1	29.8%	
Pennsylvania	Needs improvement	0	0.9%	
Rhode Island	Needs improvement	0	0.0%	
South Carolina	Needs improvement	0	1.7%	
South Dakota	Needs improvement	0	0.0%	
Tennessee	Needs improvement	0	0.0%	
Texas	Needs improvement	0	2.5%	
Utah	Needs improvement	0	0.7%	
Vermont	Needs improvement	0	0.2%	
Virginia	Solid performer	1	33.9%	
Washington	Needs improvement	0	0.0%	
West Virginia	Needs improvement	0	4.0%	
Wisconsin	Solid performer	1	24.0%	
Wyoming	Needs improvement	0	0.0%	

SOURCE: Pew Center on the States, 2010.

Data Collection

Pension Plans Included in Pew's Data Collection

Alabama: Teachers' Retirement System, Employees' Retirement System, Judicial Retirement Fund.

Alaska: Public Employees' Retirement System, Teachers' Retirement and Pension System, Employee's Retirement and Pension System, Alaska National Guard and Naval Militia Retirement System, Elected Public Officials' Retirement Plan.

Arizona: Arizona State Retirement System, Public Safety Personnel Retirement System, Elected Officials' Retirement Plan, Corrections Officer Retirement Plan.

Arkansas: Arkansas Public Employees' Retirement System, Arkansas Teachers' Retirement System, Judicial Retirement System, Highway and Transportation Retirement System, State Police Retirement System.

California: Public Employees' Retirement System, Legislative Retirement Fund, Judicial Retirement Fund, Judicial Retirement Fund, State Teachers' Retirement Fund, State Teachers' Retirement Fund Cash Balance, State Teachers' Retirement Fund Defined Benefit Supplement.

Colorado: State and School Division, State Division, School Division, Judicial Division, Local Government Division.

Connecticut: State Employees' Retirement System, Teachers' Retirement System, Judicial Retirement System.

Delaware: State Employees' Pension Plan, New State Police Pension Plan, Judiciary Pension Plan, State Police Retirement System (Closed), Diamond State Port Corporation, County and Municipal Police Firefighters, County and Municipal Other Employees, Volunteer Firemen.

Florida: Florida Retirement System, Florida Retiree Health Insurance Subsidy.

Georgia: Employees' Retirement System, Teachers Retirement System, Public School Employees' Retirement System, Legislative Retirement System, Judicial Retirement System, Georgia Military Pension Fund.

Hawaii: Employees' Retirement System.

Idaho: Public Employees' Retirement Fund Base Plan.

Illinois: State Employees' Retirement System, Judges' Retirement System, General Assembly Retirement System, Teachers' Retirement System, State Universities Retirement System.

Indiana: State Police Retirement Fund, Public Employees' Retirement Fund—State, Excise Police, Gaming Agent and Conservation Enforcement Officers' Retirement Fund, Judges' Retirement System, Prosecuting Attorneys' Retirement Fund, Legislators' Retirement System, State Teachers' Retirement Fund, 1977 Police Officers' and Firefighters' Pension and Disability Fund.

Iowa: Iowa Public Employees' Retirement System, Peace Officers Retirement, Accident and Disability System, Iowa Judicial Retirement System.

Kansas: Kansas Public Employees' Retirement System

Kentucky: Kentucky Employees' Retirement System—Non-hazardous, Kentucky Employees' Retirement System—Hazardous, State Police Retirement System, Judicial Retirement Fund, Legislators' Retirement Fund, Kentucky Teachers' Retirement System.

Louisiana: Louisiana State Employees' Retirement System (LASERS), Teachers Retirement System of Louisiana (TRSLA), Louisiana School Employees Retirement System (LSERS), Louisiana State Police Retirement System (LSPRS).

Maine: Maine Public Employees Retirement System.

Maryland: Teachers' Retirement and Pension System, Employees' Retirement and Pension System, Judges' Retirement System, State Police Retirement System, Law Enforcement Officers' Retirement Pension System, Maryland Transit Administration Pension Plan.

Massachusetts: State Employees' Retirement System, Teachers' Retirement System, State-Boston Retirement System.

Michigan: Legislative Retirement System, State Police Retirement System (SPRS), State Employees' Retirement System (SERS), Public School Employees' Retirement System (PSERS), Judicial Retirement System (JRS), Military Retirement Plan (MRP).

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Minnesota: Correctional Employees' Retirement Fund, State Employees Retirement Fund, Elective State Officers Fund, Judicial Retirement Fund, Legislative Retirement Fund, State Patrol Retirement Fund, Public Employees Retirement Fund, Police and Fire Fund, Public Employees' Correctional Fund, Teachers' Retirement Fund.

Mississippi: Public Employees' Retirement System, Mississippi Highway Safety Patrol Retirement System, Municipal Retirement System, Supplemental Legislative Retirement Plan.

Missouri: Missouri State Employees' Plan, Public School Retirement System, Missouri Patrol Employees' Retirement System, Public Education Employees' Retirement System, Judicial Plan, University Plan.

Montana: Public Employees' Retirement System—
Defined Benefit Retirement Plan, Sheriff's Retirement
System, Highway Patrol Officers' Retirement System,
Game Warden and Peace Officers' Retirement System,
Firefighters' Unified Retirement System, Municipal Police
Officers' Retirement System, Judges' Retirement System,
Teachers' Retirement System.

Nebraska: State Employees' Retirement, County Employees, Schools, Judges, State Patrol.

Nevada: Public Employees' Retirement System, Legislative Retirement System, Judicial Retirement System.

New Hampshire: Employees Group, Teachers Group, Police Officers Group, Firefighters Group, Judicial.

New Jersey: Public Employees' Retirement System, Teachers' Pension and Annuity Fund, Judicial Retirement System, Consolidated Police and Firemen's Pension Fund, Police and Firemen's Retirement System, Prison Officers' Pension Fund, State Police Retirement System.

New Mexico: Public Employees' Retirement System, Judicial Retirement System, Volunteer Firefighters Retirement Fund, Magistrate Retirement System, Education Employees' Retirement System.

New York: Employees' Retirement System, Police and Fire Retirement System.

North Carolina: Teachers' and State Employees' Retirement System, Consolidated Judicial Retirement System, Legislative Retirement System, Firemen's and Rescue Squad Workers' Pension Fund, National Guard Pension Plan, Registers' of Deeds' Retirement System, Local Governmental Employees' Retirement System. North Dakota: Public Employees' Retirement System, Highway Patrol Retirement System, Retirement Plan for the Employees of Job Service North Dakota, Teachers' Fund for Retirement.

Ohio: Ohio Public Employees Retirement System, State Teacher Retirement System, State Highway Patrol Retirement System.

Oklahoma: Oklahoma Firefighters Pension Retirement System, Oklahoma Public Employees' Retirement System, Uniform Retirement System for Judges and Justices, Police Pension and Retirement System, Teachers' Retirement System, Oklahoma Law Enforcement Retirement System, Wildlife Conservation Retirement Plan.

Oregon: Public Employees Retirement System.

Pennsylvania: State Employees' Retirement System, Public School Employees' Retirement System.

Rhode Island: Employees' Retirement System—State Employees, Employees' Retirement System—Teachers, State Police Retirement Benefits Trust, Judicial Retirement Benefits Trusts.

South Carolina: South Carolina Retirement System, Police Officers' Retirement System, General Assembly Retirement System, Judges' and Solicitors' Retirement System, National Guard Retirement System.

South Dakota: South Dakota Retirement System, South Dakota Cement Pension Trust Fund, Department of Labor Employee Retirement System.

Tennessee: State Employees, Teachers, and Higher Education Employees Pension Plan (SETHEEPP), Political Subdivision Defined Benefit Plan (PSPP).

Texas: Employees Retirement System of Texas Plan, Law Enforcement and Custodial Officer Supplemental Retirement Fund, Judicial Retirement System of Texas Plan One, Judicial Retirement System of Texas Plan Two, Teacher Retirement System of Texas, Texas Statewide Emergency Services Retirement Act (TSESRA) Fund.

Utah: Public Employees Noncontributory Retirement System (Noncontributory System), Public Employees Contributory Retirement System (Contributory System), Firefighters Retirement System, Public Safety Retirement System, Judges Retirement System, Utah Governors and Legislators Retirement Plan.

APPENDIX C

Vermont: Vermont State Retirement System (VSRS), State Teachers' Retirement System (STRS), Vermont Municipal Employees' Retirement System (MERS).

Virginia: Virginia Retirement Systems, State Police Officers' Retirement System (SPORS), Virginia Law Officers' Retirement System (VaLORS), Judicial Retirement System (JRS).

Washington: Public Employees' Retirement System Plan 1, Public Employees' Retirement System 2/3, Teachers' Retirement System Plan 1, Teachers' Retirement System 2/3, School Employees' Retirement System, Law Enforcement Officers' and Fire Fighters' Retirement System—Plan 1, Law Enforcement Officers' and Fire Fighters' Retirement System 2, Public Safety Employees' Retirement System, Washington State Patrol Retirement System (WSPRS), Judicial Retirement System, Judges' Retirement Fund, Volunteer Fire Fighters', Reserve Officers' Relief and Pension Fund.

West Virginia: The Public Employees' Retirement System (PERS), Teachers' Retirement System (TRS), The Public Safety Death, Disability, and Retirement Fund (PSDDRF); State Police Retirement System (SPRS), Judges' Retirement System (JRS).

Wisconsin: Wisconsin Retirement System.

Wyoming: Public Employees Pension Plan, Wyoming State Highway Patrol, Game and Fish Warden and Criminal Investigator Retirement Plan; Volunteer Firemen's Pension Plan, Paid Firemen's Pension Plan A, Paid Firemen's Pension Plan B, Wyoming Judicial Retirement Plan, Wyoming Law Enforcement Retirement Plan (effective 2002).

Retiree Health and Other Benefit Plans in Pew's Data Collection

Alabama: Retired State Employees' Health Care Trusts, Retired Education Employees' Health Care Trust.

Alaska: Public Employees' Retirement System Other Postemployment Benefit (OPEB), Teachers' Retirement System OPEB, Elected Public Officials' Retirement Plan OPEB, Judicial Retirement System OPEB.

Arizona: Health Insurance Premium Benefit, Long Term
Disability Program, Health Insurance Premium Subsidy—
Public Safety Personnel Retirement System, Health Insurance
Premium Subsidy—Elected Officials Retirement Plan,
Health Insurance Premium Subsidy—Corrections Officer
Retirement Plan.

Arkansas: Arkansas State Employee Health Insurance Plan, Arkansas State Police Medical and Rx Plan,19 state run plans for public colleges and universities.

California: State of California OPEB, University of California Retiree Health Plan, Medicare Premium Payment Program.

Colorado: Public Employees' Retirement Association (PERA) Health Care Trust Fund, University of Colorado OPEB, Retiree Medical Premium Refund Plan, Retiree Medical Premium Subsidy for PERA Participants, Umbrella RX Plan.

Connecticut: State Employee OPEB Plan, Retired Teacher Healthcare Plan.

Delaware: Delaware OPEB Fund Trust.

Florida: Florida OPEB.

Georgia: Board of Regents Retiree Health Benefit Fund, Georgia Retiree Health Benefit Fund, State Employees' Assurance Department.

Hawaii: Employer-Union Health Benefits Trust Fund (EUTF), Voluntary Employees' Benefit Association Trust.

Idaho: Retiree Healthcare, Long-Term Disability, Life Insurance, University of Idaho—Medical, Dental, Life.

Illinois: Health, Dental, Vision, Life, Community College Health Insurance Security Fund, Teacher Health Insurance Security Fund (excluding Chicago.)

Indiana: State Personnel Healthcare Plan, Legislatures' Healthcare Plan, Indiana State Police Healthcare Plan, Conservation and Excise Police Healthcare Plan.

Iowa: Medical Insurance and University Funds (Medical, Dental, Life).

Kansas: Health Insurance.

Kentucky: Kentucky Retirement Systems Insurance Fund—Non Hazardous, Kentucky Retirement Systems Insurance Fund—Hazardous, Kentucky Legislators Retirement Plan-Insurance, Kentucky Judicial Retirement Plan—Insurance, State Police Retirement System—Insurance, Kentucky Teachers' Retirement System.

Louisiana: Office of Group Benefits Plan, Definity Health Plan.

Maine: State Employees, First Responders, Teachers, Life Insurance Plan.

Maryland: State Employee and Retiree Health and Welfare Benefits Program.

APPENDIX C

Massachusetts: State Retiree Benefits Trust Fund.

Michigan: Legislative Retirement System (LRS), State Police Retirement System (SPRS), State Employees' Retirement System (SERS), Public School Employees' Retirement System (PSERS), Judges' Retirement System (JRS), Life Insurance.

Minnesota: State Plan, Metropolitan Council Plan, University of Minnesota Plan.

Mississippi: Medical and Life Insurance Plan.

Missouri: Missouri Consolidated Health Care Plan (MCHCP), Healthcare and Life Insurance: Missouri State Employees' Retirement System (MOSERS), Missouri Department of Transportation and Missouri State Highway Patrol Medical and Life Insurance Plan (MHPML), Conservation Employees' Insurance Plan (CEIP).

Montana: State of Montana, Montana University System.

Nebraska: Nebraska does not provide any data regarding its liability for retiree health care or other non-pension benefits.

Nevada: Retirees' Fund.

New Hampshire: Employee and Retiree Benefit Risk Management Fund, Group II—Police Officers and Firefighters, Group I—Teachers, Group I—Political Subdivision Employees, Group I—State Employees.

New Jersey: State OPEB, Local OPEB.

New Mexico: Retiree Health Care Authority.

New York: New York State Health Insurance Program, State University of New York OPEB, City University of New York OPEB.

North Carolina: Retiree Health Benefit Fund, Disability Income Plan.

North Dakota: Retiree Health Insurance Credit Fund, Retiree Health Insurance Health Care, Job Service North Dakota OPEB.

Ohio: Retiree Medical Account—Healthcare, State Teacher Retirement System—OPEB, SHPRS—OPEB.

Oklahoma: The Oklahoma State and Education Employee Group Insurance Board (OSEEGIB).

Oregon: Retirement Health Insurance Account (RHIA), Retiree Health Insurance Premium Account (RHIPA),

Public Employees' Benefit Board—Medical, Dental, Vision; SAIF Healthcare, Oregon Health and Science University Healthcare.

Pennsylvania: Retired Employees Health Program, Retired Pennsylvania State Police Program, Pennsylvania Judiciary, Pennsylvania House of Representatives, Pennsylvania Senate.

Rhode Island: Rhode Island Retiree Health Care Benefit Plan-State Employees, Rhode Island Retiree Health Care Benefit Plan—Teachers, Rhode Island Retiree Health Care Benefit Plan—Judges, Rhode Island Retiree Health Care Benefit Plan—State Police, Rhode Island Retiree Health Care Benefit Plan—Legislators.

South Carolina: South Carolina Retiree Health Insurance Trust Fund (SCRHITF), Long Term Disability Insurance Trust Fund (LTDITF), South Carolina Retirement System Retiree Life Insurance, Police Officers' Retirement System Retiree Life Insurance.

South Dakota: South Dakota OPEB.

Tennessee: Employee Group Plan, Teacher Group Plan, Medicare Supplement: State, Medicare Supplement: Teachers.

Texas: University of Texas System Employee Group Plan ("UT Plan"), A&M Care Health and Life Plan ("A&M Plan"), Employees Retirement System (ERS), Teachers Retirement System.

Utah: Other Postemployment Retirement Plan, Utah Retirement Employees Post Employment Healthcare Plan.

Vermont: Vermont State Retirement System, State Teachers' Retirement System.

Virginia: Group Life Insurance Fund, Retiree Health Insurance Credit Fund, Disability Insurance Trust Fund, Line of Duty Death and Disability, Pre-Medicare Retiree Healthcare.

Washington: State OPEB, K-12 OPEB, Political Subdivision OPEB.

West Virginia: Retiree Health Benefit Trust Fund (RHBT).

Wisconsin: State's Health Insurance Plan, Duty Disability Fund, Retiree Life Insurance Fund.

Wyoming: Retiree Health Insurance Plan.



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